



A Weekly Journal of the Chemical and Drug Trades
and of
British Pharmacists throughout the Empire.
ESTABLISHED 1859.

The CHEMIST AND DRUGGIST is the leading journal addressing the chemical and drug trades of the British Empire. It is adopted as an official journal by nineteen Chemists' Societies in Australia, Ireland, New Zealand, South Africa and the West Indies, and its paid-in-advance circulation in Great Britain and all Countries having business relations with the British Empire is intrinsically and numerically unique.

Subscription Rates.

Ten shillings a year in advance, post free to any part of the world, including a copy of *The Chemists' and Druggists' Diary* next published. Subscriptions begin every month. Single copy, 6d.; Summer or Winter Number, 1s. *Diary*, 1s. 6d. Postal orders and cheques to be crossed "Martin's Bank (Limited)."

Prix de l'abonnement annuel: le journal une fois par semaine, et l'agenda une fois par an, 12-60 francs, francs.

Jahrlicher Abonnementspreis: die Zeitung einmal wöchentlich, und der Notizzettel einmal im Jahre, 10 Mark, postfrei.

Prezzo de suscripción anual: el periodico una vez por semana, y el agenda una vez por año, 12-60 pesetas, francos.

Terms for advertising in THE CHEMIST AND DRUGGIST can be obtained on application to the Publisher at the office.

Head Office: 42 CANNON STREET, LONDON, E.C.

Telegrams: "Chemicus London." Telephone 852 Bank (two lines).

Branches: ADELAIDE, MELOURNE, AND SYDNEY, AUST.

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BUSINESS IN THE WEST.

There are large tracts of fertile country in Canada, Newfoundland, the United States, Mexico, South America, and the West Indies, peopled by British men and women. These people are large consumers of all that comes from Home, and traders in these places cater largely for their needs. We have inquiries periodically from wholesale and retail dealers in drugs, druggists' sundries, perfumery, soaps, and chemists' goods generally in these countries for advice as to the best markets for specific articles. These firms are substantial buyers, and we are giving advertisers a special opportunity of getting in touch with them by publishing on June 15 a

NEW WORLD ISSUE.

The Publisher has issued an attractive booklet giving full details of that Issue. Send for a copy.

SUMMARY OF THIS ISSUE.

The more notable items only are dealt with.

Articles and Communications.

Our Cape correspondent discusses the situation arising in South Africa from the tariff revision (p. 40).

Mr. Thomas Tyer discusses the toxicity of methyl alcohol in an article on p. 51. He incidentally states that imported preparations made with the alcohol pay duty. We recall 1906 facts to the contrary (p. 52).

The Pharmaceutical Council election appears to have given satisfaction so far as the placing of Mr. C. B. Allen is concerned (pp. 47 and 57). Correspondents support the idea of an assistants' certificate (p. 62).

Shop Act problems continue to vex the trade. A number are dealt with on p. 64, and we give on p. 43 a digest of the Irish regulations, issued this week, and refer to other matters on the succeeding pages and in our Parliamentary report.

In a communication from The British Drug Houses' laboratories, the quality of commercial storax is further discussed, and it is shown that the majority of specimens examined had been impoverished of aromatic principle (p. 61).

Mr. P. W. Squire, advertizing to the evidence of Dr. Tirard before the Patent Medicines Committee, disproves his statements regarding Squire's "Companion," and the B.P., and in respect to liq. morph. bimacnat. (p. 61). We also discuss the nature of Dr. Tirard's evidence about the B.P. imitating proprietary articles (p. 48).

News of the Week.

The Bill to increase the spirit-duty is making progress in the German Reichstag (p. 40).

The names of those who passed the Spectacle-makers' Company's recent examination are on p. 36.

An unusual camphorated-oil case is reported on p. 41, in which a branch manager was fined, but not his employer.

The County Councils' Association wants the formula on the label of medicines. See the report of their meeting on p. 36.

Mr. G. H. Marsden takes our first analytical prize, and Mr. F. Brindle the second. The detection of traces of carbon dioxide is described (p. 34).

Sir Robert Morant, Chairman of the National Insurance Commissioners, puts tuberculosis dispensaries before sanatoria in order of consideration (p. 36).

The arrangements for enforcing the provisions of the National Insurance Act appear to be proceeding satisfactorily, even as regards medical benefit (p. 56).

The generation of the high-frequency currents used in medical practice and wireless telegraphy was dealt with in a lecture by Mr. Duddell at the Royal Institution last week (p. 52).

An examination of euonymus root-bark by Mr. H. Roger-son, of the Wellcome Chemical Research Laboratory, shows that "euonymin" is a resinous mixture, and that the drug's activity is not due to glucosidic substances (p. 53).

Nine instances in which poisons have caused death have been chronicled this week. Of these four were due to misadventure. Ammonia, barium chloride, belladonna, laudanum, prussic acid, saltpetre, and spirit of salt were the articles which proved fatal in seven cases. We reserve our reports on these and the other cases.

Trade and Market Matters.

The white-lead market, which is controlled by an International Syndicate, is the subject of editorial comment on p. 49.

The approaching Whitsuntide holidays and renewed trouble at the docks have interfered with business. The chief price movements include an advance in bromides, buchu, acetic acid, Soudan acacia, and linseed oil. Citric acid, Tonquin musk, rape and soya oils are firmer; while on the easier side are opium, quicksilver (seconds), cocaine, and copper sulphate. Lemon, orange, and bergamot oils are also cheaper (p. 58).

CORNER FOR STUDENTS.

Conducted by Leonard Dobbin, Ph.D.

All communications for this section should be addressed thus:
"Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

QUALITATIVE ANALYSIS FOR JUNIOR STUDENTS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopoeia, and is to be submitted to a thorough systematic examination, all its constituents to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, marked "Corner for Students" on the top left-hand corner) will be received up to Tuesday, May 28, and the samples will be posted on the following day.

Students' reports will be received up to Saturday, June 8. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

SPECIAL NOTICE.—The prizes in this series of analyses will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, *which fact must be attested on their reports*. Others may obtain specimens of the mixture of salts, and their reports will be separately adjudicated, but they will be regarded as *hors concours*. Correspondents who do not state that they are preparing for a qualifying examination will be included in the latter list.

Report on May Analytical Exercise.

The powder distributed to students on April 24 contained 3 parts by weight of calcium orthophosphate, 1 part of potassium chloride, and 1 part of potassium iodide. The calculated composition of such a mixture is:

Ca	...	...	...	...	...	23.2
K	...	...	...	...	...	15.2
PO ₄	...	...	...	...	...	36.8
Cl	...	...	...	...	...	9.5
I	...	...	...	...	...	15.3
						100.0

The mixture also contained, as impurities, distinct traces of sodium and of the sulphuric-acid radical, and a minute trace of iron.

Samples of the powder were distributed to thirty-one students, and fifteen reports were submitted for examination. The failures in the detection of the several constituents were: (a) Metallic radicals: Calcium, 4; potassium, 2. (b) Acid radicals: Phosphoric, 1; hydrochloric, 8; hydriodic, 3. Eight students failed to recognise the presence of the small quantity of a sulphate.

This was an analysis in which the complication due to the presence of a phosphate was only slight, since metallic radicals of the iron group were absent; nevertheless, mistakes were made in some cases in consequence of precipitates having been obtained at the stage where ammonium acetate was added to the hydrochloric-acid solution of the ammonium chloride and ammonia precipitate with a view to eliminating iron and aluminium should these be present. From the information conveyed by the reports, we cannot say how the formation of these precipitates came about (and in most instances no precipitate was produced at this stage), but in any case it should have been recognised that they did not consist of aluminium phosphate since this substance is readily dissolved by solution of sodium hydroxide, whereas calcium phosphate, of which these precipitates must have consisted, is insoluble in this reagent. It is scarcely ever possible that any advantage can result (and much disadvantage is usually possible) from adding ammonium or sodium phosphate along with ammonium acetate at this point in the analysis. This procedure is often recorded in the reports sent in by students, and various errors, some of which have been

frequently referred to in this column, are directly traceable to it.

When the powder was moderately strongly heated in a dry test-tube, there was first driven out a small quantity of water, and then a distinct liberation of iodine took place. Both of these phenomena were due—the former partly, the latter entirely—to the presence of some acid calcium phosphate. Appreciable quantities of iodine would not be liberated on moderately heating a mixture of potassium iodide and tri-calcium phosphate. This point was not noted by any of our correspondents, and indeed one or two proceeded as if they supposed that the whole of the iodine could easily be driven out by merely heating the powder.

As the result of the careful application of a delicate test, two students reported the presence of a trace of a carbonate, and we therefore considered it necessary to examine this point with some detail. The method described in the reports consisted in adding some of the powder to granulated zinc and dilute hydrochloric acid in a test-tube, and leading the evolved gases through a few drops of barium-hydroxide solution placed in the bend of a small delivery-tube—the hydrogen current being designed to carry off any simultaneously liberated carbon dioxide and to bring it into contact with the barium hydroxide. On repeating this experiment it was found that a well-marked opalescence was produced in the baryta-water, but on further examination of the matter it appeared that this opalescence was not due to carbon dioxide liberated from the powder, but to the small proportion of this gas ordinarily present in the air of the laboratory. That the latter was the true cause was effectively proved by placing some granulated zinc in a test-tube, filling up the tube almost to the top with dilute hydrochloric acid, permitting the hydrogen generation to proceed for several minutes, so as to displace any carbon dioxide that might be dissolved in the hydrochloric-acid solution, then adding a considerable quantity of the powder, and at once connecting the test-tube with the delivery-tube containing a few drops of perfectly clear baryta-water. It was found that the latter reagent now remained quite free from opalescence. Another simple and instructive experiment was then made, which our correspondents may repeat with interest and advantage. A single drop of baryta-water was placed in a test-tube which had been standing simply in the laboratory, a tightly fitting rubber stopper was at once introduced and the tube was then shaken briskly for about half a minute, when the baryta-water was found to be distinctly opalescent, due to interaction with the carbon dioxide of the air. From this it seems that baryta-water is too delicate a reagent to employ for the test as carried out by our correspondents, and when we have recommended the use of the test, we have always mentioned lime-water instead. A drop of lime-water will not give any appreciable result when shaken up with a test-tubeful of air as in the experiment with baryta-water, whereas lime-water will not fail to indicate any noteworthy traces of a carbonate in a mixture if it is employed in conjunction with the zinc and hydrochloric acid test above referred to.

The most remarkable feature of the failures in this analysis was that more than half of our correspondents failed to detect the chloride. In some cases no effective test for it was applied, but it may be pointed out that most of the failures were primarily due to the omission to apply any test which could have revealed the presence of a chloride when an iodide was also present.

PRIZES.

The First Prize for the best analysis has been awarded to

G. H. MARSDEN, 51 Beech Road, Stockport.

The Second Prize has been awarded to

FRED. BRINDLE, 13 St. Helen's Road, Bolton.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

MARKS AWARDED FOR ANALYSES.

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F. Brindle (2nd prize) ...	96	Myrol	69
Virus	...	95	Student	...	55
Iodine	...	90	En Avant	...	53
Optic	...	90	Curious	...	32
Argamate	...	86	Rego	...	29
Nomen	...	78	Tartrazine	...	6
Cestrian	...	77			

To CORRESPONDENTS.

F. BRINDLE.—The carbon dioxide which you detected may have come, partly, from the decomposition of a thin layer of hydroxycarbonate on the surface of the zinc you employed, but see also the general remarks.

IODINE.—A precipitate should not have been produced on the addition of ammonium acetate to the hydrochloric-acid solution of the original ammonium chloride and ammonia precipitate, since the latter consisted of calcium phosphate only.

OPTIC.—A confirmatory test for strontium should have been applied. You do not appear to have made any test for a bromide.

ARGAMATE.—We do not consider the phosphate method which you employed a satisfactory one, and have indicated this on several occasions in this column. The matter is dealt with at some length in the *C. & D.* for April 30, 1910, index folio 652, to which you may be able to get access. The precipitate which you supposed to indicate a trace of magnesium was probably calcium phosphate.

NOMEN.—The evidence which you give as to the absence of a bromide is not quite convincing, but you may have handled the matter more fully than your report would seem to indicate. Note that the whole of the iodine was not driven out of the powder by merely heating it.

CESTRIAN.—Your report is too slender to do full justice to your moderately accurate analysis.

QUERCUS.—The decolorisation of permanganate which you attributed to an oxalate was due to the iodide present.

MYROL.—Your method of dealing with the phosphate precipitate was not quite satisfactory, and it led to an incorrect result. It is usually easier to prevent the precipitation of calcium phosphate by previous addition of acetic acid to the solution than to dissolve it in acetic acid when it has been precipitated.

EN AVANT.—In the presence of an iodide it was not possible to prove the presence or absence of a bromide by observing the smell of the vapours evolved on heating the powder with potassium bichromate and concentrated sulphuric acid.

CURIOS.—The white precipitate formed on adding ammonium chloride and ammonia as group reagents did not dissolve in potassium hydroxide, since it consisted of calcium phosphate and not of aluminium hydroxide. The original solution of the powder in hydrochloric acid did not give a precipitate of calcium oxalate on the addition of ammonium oxalate, since calcium oxalate is soluble in hydrochloric acid. Dilute—not concentrated—hydrochloric acid should be employed to test the solubility or otherwise of a precipitate supposed to consist of barium sulphate.

REGO and TARTRAZINE.—We recommend you to practise on mixtures, made by yourselves, in imitation of the powder which forms the exercise reported on in the foregoing.

NEW BOOKS.

Burnet, E. *Microbes and Toxins*. Illus. $7\frac{1}{2} \times 4\frac{1}{2}$. Pp. 332. 5s. net. (Heinemann.)

Dominici, M., and Warden, A. A. *The Technique and Results of Radium-therapy in Malignant Disease*. Royal 8vo. 2s. net. (Churchill.)

Riedel's Berichte, 1912. [This report of 217 octavo pages is divided into four parts. The first comprises research and analytical work done chiefly in the laboratories of the J. D. Riedel Co. in Berlin, including ovoecithin; the balsam from *Myrolyton punctatum*; Klotzsch; Dr. Siedler's work, cholesterol ointments, with high-water content; arachis oil, and observations on the monographs of the German Pharmacopoeia, including a large number of data regarding the ash and extract yield of official drugs. The second part of the report deals with therapeutic progress during 1911, and extends to ninety pages; the third part contains notes on the newer remedies, with special reference to those introduced in 1911; and the fourth part is a table showing the properties and manner in which Riedel's own specialities are put on the market. The J. D. Riedel Co., 54 Cannon Street, London, E.C., from whom we received a copy, state that most of the copies they have to give away have been applied for, so that prompt application must be made to them.]

Still, G. F. *Common Disorders and Diseases of Childhood*. 2nd edit. $8\frac{3}{4} \times 5\frac{1}{2}$. Pp. 828. 16s. net. (Frowde.)

ENGLISH AND WELSH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

A fire on the night of May 20, at the warehouse of Mr. T. C. Cornwell, Ph.C., Piccadilly, Hanley, was subdued before it had become serious.

The London County Council have granted poison-licences to E. C. Mudge and G. Leslie, assistants in the employ of Barr & Sons, 11-13 King Street, Covent Garden, W.C.

Six drug-samples were submitted to the Southampton analyst last quarter. All were genuine except one of milk of sulphur, for which flowers of sulphur had been supplied.

The estimated value of the chemicals required by the London County Council for the treatment of sewage at Barking during 1912-13 is 11,450*l.*, and at Crossness 10,550*l.* Last year the actual sums expended were 13,558*l.* and 10,038*l.* respectively.

The building of the Royal Society of Medicine at the corner of Wimpole Street and Henrietta Street, London, W., was opened by the King and Queen on May 22. The Queen, on entering, was presented by Mrs. Arthur Latham with a bouquet, the flowers composing it being derived from medicinal plants grown in the Chelsea Physic Garden.

Mr. Thomas Garner, chemist, was on May 17 elected an annuitant of the Royal Masonic Institution for aged Freemasons with 2,141 votes. Mrs. Ann Harris, widow of the late Mr. Henry Harris, chemist and druggist, Tunbridge Wells, who received 1,819 votes, was also elected as an annuitant of the Royal Masonic Institution for widows.

The expenditure at the Newcastle-upon-Tyne Royal Victoria Infirmary for last year on drugs, chemicals, disinfectants, etc., was 2,277*l.* 3*s.* 5*d.*, against 2,310*l.* 13*s.* 10*d.* in the previous year. Dressings, bandages, etc., cost 2,370*l.* 12*s.* 10*d.*, against 2,212*l.* 16*s.* 5*d.*; and instruments and appliances 830*l.* 13*s.* 1*d.*, against 1,545*l.* 8*s.* 2*d.* The salaries paid for dispensing amounted to 740*l.* 8*s.* 4*d.*, an increase of 69*l.* 4*s.* 4*d.* on the previous year.

A deputation from the British Medical Association awaited upon the President of the Board of Trade on May 16 to recommend the medical treatment of school children through the medium of school clinics instead of hospitals. Mr. J. A. Pease, M.P., in replying, said that the matter was one entirely for the local education authorities to deal with. The Board believed that the ideal method of treatment is on the lines indicated by the deputation, and at the present moment it was discussing with the London County Council the position and number of clinics which the latter authority was about to establish.

Lambeth Infirmary Dispenser's Salary.

The Lambeth Guardians had before them on May 16 an application from Mr. W. Thomas, dispenser at the infirmary, for an increase of salary. The Infirmary Committee reported that Mr. Thomas was appointed in 1901 at a salary of 120*l.* per annum, with dinner, valued at 10*l.* per annum. In 1904 an increase of 20*l.* per annum was granted for services as dispenser at Renfrew Road and Princes Road Workhouses; the Local Government Board declined to sanction this proposal, but approved of a gratuity of 20*l.* being paid. Further increases of 10*l.* each were granted in 1905 and in 1908. In 1909 the Guardians proposed to award Mr. Thomas an annual sum of 15*l.* in consideration of extra workhouse duties, but the Local Government Board only agreed to an increase of 10*l.* per annum. In 1910 his salary was increased to its present amount, 160*l.*, including 10*l.* for extra duties. The medical officer reported that the applicant's work had been considerably increased during the past quarter owing to the inauguration of the central drug-stores and by the temporary arrangements for dispensing medicine for the outdoor poor of three districts. The committee recommended that Mr. Thomas's salary

be increased to 180*l.* per annum, with dinner daily. In anticipation of the dispensing of medicine for the poor of two more districts being taken over by Mr. Thomas, the committee further recommended that upon the arrangement becoming effective, he be paid at the rate of 20*l.* per annum in respect of the additional duties. The Board, without discussion, unanimously resolved to grant the increases, subject to the approval of the Local Government Board.

A West-end Development.

We hear that an invasion of the West-end of London by fully a score of pharmacies uniform in style may shortly be expected. They will be tip-top and original in get-up; the goods will be characteristic and exclusive to them, and will embrace high-class toilet and other specialities manufactured exclusively by the company which is taking the premises at which the pharmacies are to be carried on—in short, the series will be a new departure, and will not be "Rexall." It is, in fact, remarkable that this announcement should appear at the same time as a notice stating that the United Drug Co., Ltd., is giving up its London office.

Spectacle-makers' Company.

The following is the pass-list of the examination in optics and sight-testing held in London this month:

I. G. Aitchison (first prize).	M. B. Jackson.
M. F. Betchler.	C. J. Jones.
A. Breece.	L. Knight.
H. F. Fairbanks.	J. J. Loughran.
T. H. Foden.	W. R. Lawson.
R. A. Garratt (third prize).	J. H. Meadowcroft.
J. J. Gautrey.	F. J. Parker.
C. P. Ghose.	F. N. Scotland.
E. Goldsbury.	A. E. Sumption.
E. Hamer.	G. F. J. Townsend.
A. F. Heslop.	A. D. Wood.
L. S. E. Hine.	R. Woodfall.
J. C. Hughes (second prize).	

Patent Medicines and Tuberculin Dispensaries.

The annual meeting of the County Councils Association was held at the Caxton Hall, Westminster, on Tuesday, May 21. The annual report, which was adopted with little comment, contained the following reference to suggested amendments of the law relating to food and drugs:

"The Council decided again to press the Local Government Board to introduce legislation to carry out the recommendations of the Departmental Committee appointed to inquire into the use of preservatives and colouring matters in articles of food. They further adopted the following resolutions with regard to proprietary medicines:

"(a) That, for medicines which are supplied otherwise than upon medical, dental, or veterinary prescriptions, no condition of sale short of the publication on each packet of medicine of the name and proportion of each of its ingredients should be permitted.

"(b) That the label should be made to constitute a warranty, and that false descriptions, with regard to the ingredients, whether on the label or in an advertisement, should be made an offence.

"(c) That the provisions of the Sale of Food and Drugs Acts should be applied to proprietary medicines."

The Council adopted certain resolutions on short weight and measure passed at a conference with representatives of the Association of Municipal Corporations, the Incorporated Society of Inspectors of Weights and Measures, and the Corporation of Glasgow, and decided to ask the Board of Trade to appoint a Select Committee to consider such amendment of the Weights and Measures Acts and the Merchandise Marks Act as would enable local authorities to protect the public against short weight and measure. Sir Robert Morant, Chairman of the National Insurance Commissioners, was present, and addressed the meeting on the action which it is contemplated should be taken by county councils preliminary to the Insurance Act coming into operation. Speaking of the tuberculosis campaign and the sanatorium benefit, he said that the thinking out of the scheme of tuberculin dispensaries was even more urgent than thinking out the sanatorium problem.

Successful Singers.

Mr. Charles Davis, chemist and druggist, Leamington Spa, was, with Miss Francesca Hall, one of the successful competitors at the Birmingham Musical Festival on

May 16. These singers were among the eight pairs entered in the class for mezzo-soprano and baritone duets, and tied for second place with two Moseley duettists. After hearing both couples go through the test-piece "O that we two were Maying" (Henschel), the judges pronounced each of equal merit, and adjusted the difficulty by awarding a second prize of the same value. Miss Phyllis Mary Ferguson, daughter of Mr. J. E. Ferguson, chemist and druggist, manager of the Leamington branch of Boots, Ltd., obtained the second prize in the open class for soprano solos with 172 marks out of a possible 200. There were thirty-nine competitors.

Birmingham Notes.

Pharmacists may expect calls for Paris-green and lead arsenate, as these compounds are recommended to "Mail" readers for "grub" on rose-trees.

As might have been expected, the inevitable has happened. The Midland pharmacists have secured the necessary green patch for Wednesday afternoon's cricket.

Miss Vera Alcock, aged twelve, is the author of a column-length story for children in the "Birmingham Weekly Post" for May 18. She is the daughter of Mr. F. H. Alcock, Ph.C., F.I.C.

Liverpool Notes.

The Chief Constable has recently sanctioned an increase of payment for dispensing for the members of the City police force. The payments are now on a *per capita* basis.

The Wednesday half-holiday was more general last week, almost every chemist in the suburbs taking advantage of it. Several "sporting" chemists went, for the first time in their lives, to Chester races to see the race for the "Cup and Cheese."

The premises at 114 Old Hall Street, Liverpool, to which the United Drug Co., Ltd. (Rexall), is removing from London, are at present tenanted by an American firm of agents for office furniture, hardware, roll-top desks, etc. Nos. 114 and 116 form imposing buildings and the American firm occupy both at present.

Great satisfaction is felt by the members of the Liverpool Chemists' Association that their President, Mr. G. V. C. Last, has been elected on the English National Pharmaceutical Committee on Insurance, and that Mr. W. A. Wynne (Rock Ferry) has been elected as the representative for Lancashire and Cheshire on the same committee.

Mr. Inman, chemist and druggist, Dale Street, Liverpool, who recently took over premises from Messrs. Budden & Co., has had the whole of the shop-front replaced by more modern fittings. The window is divided in the centre by a projecting bastion-like partition, which not only displays its contents to better advantage, but arrests the attention of the passers-by.

Manchester Notes.

An old-established chemist's business in the city is about to be turned into a private limited-liability company.

There is an epidemic of measles and whooping-cough in Manchester just now, nearly 400 cases having been reported during the last fortnight. Some chemists are finding a sudden increase in the demand for medicines.

Mr. A. E. H. Blackburn has withdrawn his resignation as Senior Vice-President of the Manchester Pharmaceutical Association, so that the two Vice-Presidents, Mr. Blackburn and Mr. F. W. Bates, now stand as elected at the annual election on May 1.

Developments of a somewhat sensational character are taking place in Manchester in connection with the medical opposition to the Insurance Act. Dr. T. A. Helme, of Manchester, has resigned the office of Treasurer of the National Medical Union, owing to some dissatisfaction as to membership and representation.

Contracts.

Slough Urban Council.—Mr. W. Wigglesworth, Slough, appointed chemist for a year.

Winchester Guardians.—Mr. A. B. Gibb, Winchester, appointed chemist to the workhouse for the ensuing year.

Weston-super-Mare Urban Council.—Mr. Joseph Hicks,

chemist, Weston, for the supply of drugs, etc., for the hospital for a year.

Cardiff City Mental Hospital.—C. J. Hewlett & Sons, Ltd., for the supply of drngs at 33½ per cent. off specified prices, and Ferris & Co., Ltd., for druggists' sundries at 15 per cent. off.

Government Contracts.—Admiralty : Pilchers, Ltd., for sperm oil. India Office : Spencer, Chapman & Messel, Ltd., for copper sulphate; Johnson, Matthey & Co., Ltd., for mercury; Sir W. A. Rose & Co., for turpentine. Crown Agents for the Colonies : C. Price & Co., for linseed oil and turpentine.

Forged Orders.

At the Central Criminal Court on May 17, Alfred Graham MacIntyre (42) pleaded guilty to forging orders for the delivery of sixty dozen boxes of pills and five Kodak cameras, with intent to defraud (*C. & D.*, April 27, index folio 596). It was stated that prisoner had for some time past been practising a series of systematic frauds upon wholesale chemists and other firms by means of bogus orders. In the present instance the forged order for the pills was in the name of Messrs. Lewis & Burrows, Ltd. (*C. & D.*, April 20, index folio 589), and presented to the Foster-McClellan Co., 8 Wells Street, Oxford Street. Prisoner was arrested in Kingsway on April 22 after presenting a forged order for five cameras to Kodak, Ltd. Detective-Sergeant Besler said that the prisoner had already served two terms of penal servitude for fraud and theft, and there were other convictions against him dating back to the year 1889. MacIntyre pleaded for leniency, saying that since his release from prison he had done his best to gain an honest livelihood. The Recorder (Sir Forrest Fulton) said it was clear that the prisoner was an habitual criminal from whom society must be protected. He sentenced him to five years' penal servitude.

[At the Clerkenwell Police Court on June 25, 1901, this man, giving the name of Frederick Williams, *alias* MacIntyre, was charged at the instance of Messrs. Wright, Layman & Umney, Ltd., and Messrs. G. B. Kent & Co., Ltd., with forging and uttering orders for goods on counterfeit blank order-forms. It then transpired that the prisoner's name was Archibald G. MacIntyre. At the Mansion House Police Court on the following day the prisoner was charged, under the names Frederick Smith and Frederick Williams *alias* MacIntyre, with forging and uttering an order for the delivery of 56 lb. of saccharin, valued at 128*l.* 16*s.* He presented it at the offices of the Saccharin Corporation, Ltd., and it purported to be signed by Messrs. Wright, Layman & Umney. On July 2 he was further charged at the Clerkenwell Police Court in respect to orders given to Messrs. William Sutton & Co. and others. At the Mansion House on July 4, William Kenrick was charged with being concerned with MacIntyre in uttering and forging orders, and other cases were subsequently brought against them. The accused were committed for trial, and at the Central Criminal Court on July 24, MacIntyre was sentenced to seven years' penal servitude, and Kenrick was sent to prison for twelve months, with hard labour. Again, at the Clerkenwell Sessions on June 16, 1908, Alfred Graham MacIntyre (37), described as a chemist, pleaded guilty to theft, and was sentenced to twelve months' imprisonment. He is the same MacIntyre, and had been released in December 1906. At the 1901 trial Mr. Charles Umney stated that MacIntyre was at one time with his firm. The sketch portrait is one made in Court then.]

From Various Courts.

At Taunton on May 21, Harry Smith was sentenced to two months' hard labour for smashing a plate-glass window (value 4*l.* 10*s.*) at the pharmacy of Messrs. Gregory & Wren, chemist, Taunton. The window was not insured.

In the Children's Court, Highgate, London, Robert Laybourn (12), errand-boy, was charged with stealing 12*s.* 6*d.* and four books of stamps (value 8*s.*) from his employer, Mr. Charles S. Turnbull, chemist and sub-postmaster, 100 Alexandra Park Road, Muswell Hill. It was urged that the boy fell into sudden temptation, and that, as a

boy scout, he would have to submit to a Court of Honour. The lad was placed on probation for twelve months.

In the City of London Court, before Judge Lumley Smith, K.C., on May 17, Mr. W. W. Drinkwater, Goodson Road, Willesden, recovered 44*l.* 1*s.* 6*d.* from Messrs. Allen & Hanburys, Ltd., for damages caused to one of his mud-vans owing to the negligence of one of defendants' motor-van drivers on January 24. Defendants' motor-van collided with another van, and their case was that the damage was caused by the other van, which could not now be traced.

IRISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

The Navan Board of Guardians have appointed Mr. J. P. T. Timmon, Ph.C., to attend the Tuberculosis Conference in Dublin this week.

Mr. W. B. Harrington, F.C.S., of Messrs. Harringtons, Ltd., Patrick Street, Cork, has been elected Vice-President of the Cork Industrial Development Association.

At the annual meeting of the Belfast branch of the Royal Medical Benevolent Society on May 17, Sir William Whitla, L.P.S.I., was elected on the committee.

At a meeting of the Public Libraries Committee of the Dublin Corporation last week, Alderman J. C. McWalter, M.P.S.I., was appointed Chairman of the committee.

Mr. Alexander McDowell, registered druggist, 348 Newtowards Road, Belfast, has given up business, as he intends to go abroad. He is a son of Mr. Samuel McDowell, druggist, Shankill Road.

Mr. J. E. Connor, J.P., pharmaceutical chemist, Newry and Warrenpoint, has been appointed to represent Warrenpoint Technical Instruction Committee at the Irish Technical Congress in Cork next month.

Mr. Thomas Johnston, of Messrs. Grattan & Co., Ltd., Corn Market, Belfast, who has obtained an appointment with Messrs. Oppenheimer, Sons & Co., Ltd., London, was before leaving the city presented with a traveller's outfit by his fellow-employees.

Mr. W. Hopkins Ashmore, Ph.C., Dawson Street, Dublin, has been appointed a member of the Executive Committee of the Dublin Citizens' Incorporated Association, an organisation formed for the advancement of the commercial and civic interests of its members.

SCOTTISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Glasgow.

Those who intend entering either for the senior prize of 3*l.* 3*s.* or the junior prize of 1*l.* 1*s.* in the Glasgow and West of Scotland Chemists' Association bursary competition should send in their names at once either to Mr. Kitchin, Hon. Secretary, 116 Nithsdale Road, or to Mr. Hart, 362 Dumbarton Road, Partick.

Edinburgh.

There are rumours of yet another chemist invading Suburbia, somewhere in the Morningside district, it is said.

The Edinburgh Pharmacy Athletic Golf Club held their annual competition at Gullane on Tuesday, May 21, when the winners were : (1) Mr. J. Thow, (2) Mr. S. Robinson, and (3) Mr. D. H. McKenzie.

Chemists have been receiving considerable attention in the local Press of late. One paper published a long article, from which it might be gathered that the drug-trade is simply seething with discontent!

On the May holiday, Tuesday, May 21, some chemists closed all day; others opened only in the morning; and the remainder either did not close at all or opened in the evening and had Wednesday as the half-holiday.

Play for the Edinburgh Chemists' Golf Club's "Gibson" Medal handicap has taken place on Braid Hills Course, with the following result : (1) Mr. A. J. Clark, 75 net; (2) Mr. W. Gibb, 83 scratch; and (3) Mr. J. Deas, 86 net.

The Marquis of Linlithgow, to whom twin sons were born recently, does not lavish medicines and drugs upon his tenants quite so freely as did his father. In those days a chemist in Queensferry received a large batch of orders, morning and evening, and some of the recipes were alleged to have been sampled by everybody on the Hopetoun estates in turn. Now a considerable modification of the quondam free dispensing prevails.

FRENCH NEWS.

(From the "C. & D." Paris Correspondent)

RETIRING ON PENSIONS.—M. G. Bouchardat, Professor of Mineralogy and Hydrology at the Paris School of Pharmacy, and M. Frébault, Professor of Chemistry and Toxicology at the Toulouse Faculty of Medicine and Pharmacy, will retire on pensions as from November 1 next, with the title of Honorary Professors.

PHARMACISTS' ASSURANCE.—M. Lajoux, manager of the assurance services organised under the patronage of the General Association of French pharmacists, recently lectured at Dijon on this subject. He explained that the present system had its origin in the Society for Mutual Assurance against Dispensing Accidents, founded in 1891 by M. Crinou, and that, besides insurance against dispensing and other errors, the Society assures against the depreciation in value of a pharmacy through such errors; while special branches have been opened for (1) sick insurance (cost of a locum tenens, etc.), with lump sum in case of disablement or death by accident; (2) insurance of all extra hands under the Employers' Liability Act; (3) insurance against damages caused by his employés, either in the streets or in the pharmacy; and (4) against certain expenses inseparable from serious fires, yet not covered by ordinary fire-insurance policies. The total of these guarantees is offered for a sum which averages 4*l.* a head.

PARIS SOCIETY OF PHARMACY.—At the May meeting of this Society the General Secretary read a letter from the Prefect of the Seine giving the Society a formal authorisation to accept the legacy left by the late Professor Leidié, which amounts to 20,000 fr. (800*l.*). Professor Bourquelot read a paper giving the result of researches made by him, in collaboration with M. Bridel, regarding the action of emulsin on gentiopicroin in methylic-alcohol, acetone, and acetic-ether solutions. Among the other papers read was one by Professor Léger, in which he indicated the impossibility of procuring at reasonable price chrysophanic acid chemically pure for medicinal use. Chrysophanic acid of this purity can only be sold at such excessively high prices that its therapeutic use is practically impossible. The Professor considers that this state of affairs deserves attention, it being incomprehensible that manufacturing chemists should supply one product for another, without making any effort to furnish a drug which is in demand. On the other hand, under existing circumstances, it would be unjust if inspectors of pharmacies were to take action against a dispensing chemist for having substituted the drug he can obtain for one which, though prescribed, is not to be had in the ordinary way of business.

BENJAMIN FRANKLIN'S MINERAL WATERS.—The last of the great parks of which the summer verdure was one of the charms of the Passy district of Paris is now being cut up into building lots. This open space was specially interesting as the site of the ferruginous springs first made known by Abbé Ragois, chaplain to Madame de Maintenon, in 1719. Here Jean-Jacques Rousseau "took the waters" in 1750, and Benjamin Franklin probably chose Passy (then a country village outside Paris) as his residence solely on account of its Spa. It was then at the height of its fame. The waters were so heavily charged with iron that they had to be decanted in huge earthen jars, some of which were to be seen on the spot until quite recently.

Then they were bottled and placed on sale at Cadet's pharmacy in the Rue St. Honoré, the pint bottle costing seven sous and the four-pint bottle twenty-four sous. Franklin (who was a personal friend of the owner of the park and springs) never drank any other water during his residence in Paris, and when he returned to America, took with him a supply sufficient for several years. The waters were declared by the Faculty to be ferruginous, sulphurous, and balsamic; they also contained magnesia and alumina. Neglected during the Revolution, they regained some of their popularity during the reign of Napoleon I., then became gradually neglected, and finally forgotten about 1870. Madame Bartholdi, who inherited the property about this time (and whose death has occasioned its sale) allowed any person to take the waters-free, and this was possibly their death-blow; on the well-known principle that what costs nothing is popularly supposed to be worthless.

GENIUS AND DISEASE.—The perennial but ever novel subject of the dividing line between the genius and the madman is revived in two or three recent French medical works and reviewed by M. Bourdeau in the "Journal des Débats." Dr. Grasset thinks previous writers have been far too dogmatic in the subject, and points out that it is a question of gradual development. For instance, Auguste-Comte, the pioneer of Positivism, was subject to crises of veritable madness; whereas the mental aberrations of Bernardin de St. Pierre or Balzac were of a comparatively slight nature. The Russian novelists, from Gogol to Gorké, offer us "a veritable museum of half-madmen." Dr. Grasset does not think genius is produced by neurosis, but that neurosis is "the price of genius." It may be partial—the cerebral centres which were affected in Pasteur's brain were not the same as those to which we owe his remarkable discoveries. Drs. Remond and Vorvenel, in their work on "Literary Genius," point out that tuberculosis is an "elegiac" malady affecting many poets and artists—Watteau, Mozart, Chopin all bear this mark of mild melancholy. Gustave Flaubert and the Russian Dostoiewsky were epileptics. The signs of approaching madness may be read between the lines of certain of Guy de Maupassant's works, and the writing of Gerard de Nerval's "Rêve et Vie" is distinctly hysterical. A distinction may be drawn between the higher and more robust genius—Shakespeare, Goethe, Molière, Racine, Hugo—who works without stimulants, and the "half-genius," who requires the aid of alcohol or opium to excite his mental emotions and passions. Edgar Allan Poe's tales of mystery and imagination were thus produced, also Quincey's "Confessions of an Opium-eater." Musset, Baudelaire, and Verlaine are comparatively modern French instances of remarkable imaginative work coupled with abuse of stimulants.

COLONIAL AND FOREIGN NEWS.

RUBBER EXHIBITION IN JAVA.—An International Rubber Congress and Exhibition will be held at Batavia in April 1914. It will be organised by the Netherlands Indies Agriculture Syndicate ("Nederlandsch-Indisch Landbouw-Syndicaat"), and will have the support of the Government and many influential persons, commercial bodies, and estates. The Governor-General of the Netherlands East Indies will be Honorary President, and a complete detailed programme will shortly be published. This is the first International Rubber Exhibition to be held in one of the important rubber-producing countries.

PHARMACEUTICAL SPECIALITIES IN URUGUAY.—In our issue of February 17 we gave particulars of the regulations regarding the sale of pharmaceutical specialities in Uruguay, and last week (index folio 710) we reported they had been postponed until April 25, 1913. The American Consul at Monte Video has also been investigating the matter, and in the course of his report, which covers much of the information already given in the *C. & D.*, he states that those pharmaceutical specialities authorisation for the sale of which is requested must be possessed of "real pharmaceutical merit." Druggists are authorised to sell without a special ruling of the National Council of Hygiene

medicinal preparations made in their pharmacies the formulas for which are included in any official Pharmacopeia.

TRADE-NAMES IN ITALY.—A recent incident in the Milan Town Council has given rise to heated discussions on the question of substitution, particularly of protected synthetics. A member of the Town Council, a doctor, during a debate on the supply of drugs to the poor of the city, impeached the integrity of the pharmacists, whom he accused of wholesale adulteration and substitution. A vigorous protest by the pharmacists followed this onslaught, but raised in turn a discussion on the question of synthetics. This has been a very vexed subject owing to the peculiar attitude adopted by the authorities, who have included the protected names of some synthetics as synonyms for official products in the Pharmacopœia, while the official prescription tariff only mentions the chemical names, and gives no information as to the charges to be made for the protected preparations when these are prescribed. It is stated that in the new edition of the tariff the protected names will be made synonymous with the chemical designations, and only one charge for both products admitted. One view is advanced to the effect that the mere prescribing of the protected name does not compel the pharmacist to dispense the patented or trade-marked article; this would only be necessary when the name of the manufacturer is added. This is met by the assertion that the dispensing of a preparation corresponding to the pharmacopœial requirements does not clash with the penal code, which only punishes a pharmacist for not supplying drugs of the "nature and quality" prescribed, and that the inclusion in the Pharmacopœia of the protected names alone—without the name of the manufacturer—gives them the character of commercial designations.

JAPANESE JOTTINGS.

(From the "C. & D." Correspondent.)

PHARMACY CONCESSIONS.—The law relating to pharmacy concessions was proclaimed on March 28, and is to be put in force on July 1.

THE WORLD EXPOSITION which was to have been held in Tokyo in 1917 has been altogether abandoned, and not merely postponed, as some reports had it.

RED CROSS CONFERENCE.—At the forthcoming International Red Cross Conference in Washington, the Japan Red Cross Society will be represented by Baron Ozawa, Vice-President. Forty-five articles will be shown in a competitive exhibition to be held in connection with the conference.

OSAKA UNIVERSITY.—A committee of thirty-five well-known personages in the city are investigating a scheme for the foundation of a University at Osaka. It is said that the inquiry is including a proposal to convert Osaka Higher Medical College as a constituent of the proposed University.

THE OSAKA CHEMICAL INDUSTRY CO., LTD., with a capital of 700,000 yen (170,000*l.*), is being organised by Dr. M. Ogata, director of the Ogata Hospital; R. Imanishi, director of the Hanshi R. R. Co.; and other capitalists in Osaka. It is intended to compete with European makers of fine chemicals, including bismuth salts.

WOMEN PHARMACISTS.—An association for the women pharmacists of Kobe and Osaka was founded in January last. The first general meeting was held at the Osaka Pharmacy School on March 21, when seventy-five women pharmacists were present, and the aims and objects of the association were discussed at length. This is the first organisation of its kind in Japan.

"**JINTAN.**"—Business in patent medicines in China seems to be assured of many more prosperous years to come, says the "Manchurian Daily News." "Jintan," a popular tonic of Japanese origin, was exported last year to the amount of 450,000 yen (45,000*l.*), of which about one-fifth went to Manchuria. It is in fact the most important article of export from Japan in patent medicines.

SOUTH AFRICAN NEWS.

(From "C. & D." Correspondents.)

"**The Chemist and Druggist**" is regularly supplied by order to all the members of the seven Societies and Associations of Chemists in British South Africa, as well as to other chemists in business there.

The Union.

CAMPHOR.—In further reference to the note published in the *C. & D.* last week, we find that the "South African Agricultural Journal" has been advocating the cultivation of camphor "as an industry that is well worth trying in the warm and moister regions of the Union, and one that might become a valuable asset to the country." The writer estimates the profits on the industry, with the price of camphor at 1*s.* 6*d.* per lb., at about 10*l.* per acre, after two or three years, increasing as the trees matured. In Ceylon, he says, the cost of pruning, distilling, and putting the camphor on the market does not exceed 3*l.* per acre. [The writer has an exaggerated idea of the possibilities. Camphor is not commercially produced in Ceylon.—EDITOR, *C. & D.*]

THE MARCH IMPORTS of drugs, chemicals, and apothecaries' wares into the Union amounted in value to 77,810*l.*, against 66,139*l.* in 1911, and for the three months ending March 1912 the imports were valued at 224,547*l.*, as compared with 217,867*l.* in 1910. Among the quarter's imports, the following are of interest, the figures in parentheses representing those for the first quarter of 1911: Apothecaries' wares of all kinds, 41,937*l.* (31,406*l.*); sodium cyanide, 2,476,278 lb. (3,311,268 lb.); disinfectants and germicides, 13,413*l.* (8,841*l.*); medicinal preparations, 33,070*l.* (28,086*l.*); caustic soda, 743,898 lb. (750,251 lb.); etc. The amount of glycerin imported for manufacturing purposes during the quarter was 2,740,600 lb., against 4,171,453 lb. for 1911. Greatly improved business in medicinal preparations and apothecaries' wares is a feature of the above figures for the first quarter of the year.

Cape Province.

MR. ROBERT SMITH SMILES, chemist, Mowbray, near Cape Town, and at Koffyfontein, Orange Free State, is gazetted as declaring his intention to surrender his estate.

BETTER BUSINESS.—Our Cape correspondent, writing on May 1, says that trade in both wholesale and retail drug-circles had been good during the past three months, this being due to the number of visitors down from up-country and to the fact that Parliament is sitting. The outbreak of plague at Durban doubtless prompted those residing in the Orange Free State and Transvaal on vacation bent to travel south in preference to Durban. The three wholesale houses at Cape Town are working at full pressure. The docks that some six months back presented such a forlorn appearance from Thursday morning till Monday morning, often with but a single ship in and as often again not that, now show signs of business.

THE THIRD MEETING in the estate of Harry Evans, formerly a chemist at Cape Town, was held on April 26. Mr. M. P. Steyn, the trustee, said that the debtor left the country shortly after his estate was placed under sequestration, and that his affairs seemed to be much involved; he left no books behind, and it was difficult to trace his dealings. Debts to the amount of 3,794*l.* had been proved. The assets were a house valued at 1,850*l.*; furniture, 122*l.*; 2,000 ordinary shares in Petersen, Ltd., pledged to the Donn Trust, and 4,000 preference shares in Petersen, Ltd., pledged to the Standard Bank of South Africa and partly to Dr. A. H. Petersen. The ordinary shares held by the Donn Trust were put up for auction and fetched 150*l.*, but the value of the preference shares was not known. The further administration of the estate was left to the trustee.

Orange Free State.

GENERAL HERTZOG, Minister of Justice of the Union, a few months back lost a case brought against him by a Government official of the Orange Free State. On April 25 the General settled up with Dr. Ward, President of the

O.F.S. Medical Council, by paying 100/- and all costs; the case was settled out of court. The action brought by Dr. Ward arose out of speeches made by General Hertzog during the election campaign. At Smithfield, O.F.S., the General referred to the attitude of the Medical Council with regard to its examination of the qualifications of two applicants, and declared the Council displayed an unworthy attitude.

New South African Customs.

(From our Cape Correspondent.)

THE Chairman of the South African Manufacturers' Association (Mr. A. B. Reid, head of the firm of Messrs. A. B. Reid & Co., Cape Town), in the course of a speech at the annual congress recently held at Port Elizabeth, expressed surprise that the South African Press took exception to the proposed increase in duties as laid down and recommended by the late Tariff Commission. He opined that the commission did not go far enough, lacking courage to give effect to protectionist principles. It follows, of course, that the South African Manufacturers' Association can only view the tariff question from the point of view of, and in the interests of, its members. "South Africa," Mr. Reid stated, "should look forward to the time when as far as possible it can be politely independent of the rest of the world." The fact that a nation that wants to sell must also buy seems to be overlooked. Sounder views are sadly needed surrounding the issue of South African trade and its factories generally, and in connection with the Customs Tariff in particular. The Transvaal Manufacturers' Association held a general meeting about the same time as the South African Manufacturers' Association. The Chairman (Mr. J. Mitchell) welcomed the clause known as the "Dumping Clause" contained in the Customs Management Bill, and expressed regret that importing agencies were opposing it tooth and nail. The attitude of the Transvaal Association is much the same as that at the Cape. The Transvaal Association says that the Customs Management Bill will not pass through Parliament and become law this Session, but that the Government will give due consideration during the recess. The C. & D. correspondent, on making inquiries in official circles, was informed that if at all possible the Bill would be passed. It had not been decided to allow it to stand over till Parliament again meets, and the only reason for such a course would be rush of work. As with all young nations, South African factories turn out very few articles that are not better than those produced in Europe! It may be a fishing-boat, or a piece of furniture, or eau de Cologne, or a hair-wash—they are all hailed as by far better than the imported. How this can be reconciled with the fact that so many articles made up in South Africa carry oversea fictitious names and addresses with a view to impressing the unwary is not, of course, explained. In this respect the drug-trade is by no means alone. There are laws in all the States in South Africa to stop this kind of thing, and when Parliament does deal with the Customs Management Bill and the "Dumping Clause" some attention might well be given to the existing Trade-marks Acts that are actually law, but rarely enforced. The Customs Tariff up to the end of last year was working fairly smoothly so far as the drug-trade was concerned. Commissioner Honey was then at the head of the Customs, resident in Pretoria. Owing to ill-health he retired, and the former Controller of Customs of Natal (before Union), Mr. Geo. Mayston, who was on the retired list and resident in England, was offered the position. It was thought at the time that until a new tariff was framed things would go on as before, but in this respect the drug-trade at least has been disappointed. The pill and tablet question was again raked up after just six years of peace, and after four solid months of controversy the trade is informed that the old order of working is to be reverted to, so our correspondent was officially told on April 26. The controversy started in January last. When it is remembered that with one exception the officials are the same as in 1906, when the interpretation of the tariff was settled in regard to pills and tablets for all time, or till such a time as a new tariff was framed and made law, the action of the Commissioner at the beginning of the year is inexplicable. At Cape Town the Customs did one thing: 20s. per lb. weight was charged, but a list was made out of certain lines that could come in at 15 per cent. *ad val.*, less the preferential rebate on British goods. At Algoa Bay, East London, and Durban the Customs knew nothing of it, and just what happened in the Transvaal it is difficult to say. The Johannesburg official instructions do not agree with the Cape. While wholesalers were held up at the Customs with shipments of pills and tablets, retailers, who for the

most part employ clearing agents, had little or no cause to complain, as it does not appear to have dawned on the Customs to treat all alike. However, all is well that ends well.

OUR GERMAN LETTER.

(Special Correspondence to the "C. & D.")

Spirit-duty.—The new Bill relating to the withdrawal of the rebate on spirit-duties passed its second reading in the Reichstag on May 20, although practically all the trades and industries using spirit, and also the Board of Commerce in Cologne, have continued to protest against it. The Hansa Bund, consisting of fifty representatives of consumers, presented a third protest to the Reichstag, but it was of no avail.

Koko or the Hair.—The Association of Manufacturers of Registered Articles has issued the following statement to the technical Press:

"Our Association has been requested by the druggists in Crefeld to take action against the advertisements of the Koko-Maricopas Co., Ltd., of London, which advertises its Koko Hairwash as a 'hair-growing remedy' and 'hair-restorer.' The well-reputed German cosmetic industry only produces preparations for the care of the hair, but not remedies for promoting the growth of the hair. In response to the request made by the respectable retailers, we have instituted legal proceedings against the English firm and against those dealers in Crefeld who sell this hairwash. Upon our motion, the Royal Provincial Court of Crefeld, section for commercial affairs, has issued the following provisional decree:

"According to paragraph 25 of the law against unfair competition the defendants are by this provisional judgment forbidden to designate the Koko Hairwash in public advertisements, on the packages, or on the labels, as a 'hair-growing remedy' or as a 'hair-restorer': every case of contravention being liable to a fine up to 75l., or to imprisonment not exceeding six weeks."

CANADIAN NEWS.

(From the "C. & D." Correspondent.)

PAPER FROM STRAW.—A company is being incorporated in Canada for manufacturing paper from flax-fibre, which at present is a waste product.

THE MONTREAL COLLEGE OF PHARMACY closed its forty-fourth session this month. It has been one of the most successful sessions in the history of the college.

OPIUM SMUGGLING.—An account is given in the Canadian papers of the recovery of tins of opium from the bed of the Upper Niagara river. A motor-boat went over from the Canadian shore in such a suspicious manner that it was followed by the police-boat; then occurred a series of splashes, which turned out to be made by tins of opium thrown out by the first boat.

SIR EDWARD EVANS, of Liverpool, paid a brief visit to the New York offices of his company on May 4, prior to leaving for Montreal, where he attended the annual meeting of the National Drug and Chemical Co. Before leaving New York, Sir Edward described the drug-market in the United Kingdom as recovering rapidly from the depression caused by the recent coal strike and shipping troubles.

FAIRCHILD SCHOLARSHIP EXAMINATION.—The entries for the scholarship (50l.) and prizes (four of 5l. each) must be sent before June 1 to the Secretary, Mr. A. E. Holden, Albert Chambers, Holborn Viaduct, London, E.C., who will supply applicants with the particulars. The examination will be held in July in Belfast, Cardiff, Edinburgh, London, and Manchester.

CORFU OLIVE-OIL CROP.—H.M. Consul at Corfu reports, under date of May 9, that very little olive oil is expected to be made in that district in 1912, as the trees only bear fruit every other year; a large quantity of last year's fruit is still on the trees. The present price of olive oil is 58 to 82 drachmae (about 2l. 6s. to 3l. 6s.) per barrel of 16 gals., according to quality; it is impossible, adds the Consul, to say if these prices will be maintained. There is a large quantity of oil in the island for sale.

LEGAL REPORTS.

TRADE LAW.

Analysis and Recipe.—In the City of London Court, before Judge Lumley Smith, K.C., on May 17, Dr. Julius Lewkowitsch, analytical and consulting chemist, 71 Priory Road, N.W., sued the Increased Power Co., Ltd., 11 Queen Victoria Street, E.C., to recover seven guineas, being the balance of seventeen guineas, for making an analysis of a grease. Mr. Hatch, plaintiff's solicitor, stated that defendants sent him some grease (which they were going to put on the market) for analysis, and no fee was arranged. Plaintiff put in a lot of time and did the work, sending the defendants an analysis. He charged seventeen guineas for his work. Defendants offered ten guineas, and had since increased that to fifteen guineas, which had been paid into court; but the plaintiff would not take that. Dr. Lewkowitsch, in the course of his corroborative evidence, stated that he informed the defendants that the work was difficult, and it would not be a question of two or three guineas. He was told that the material, which would cost 4*l.*, would be sold to the public for 2*s. 6d.*, but he said he did not want to know anything about that. Defendants evidently wanted a formula from which they could make up the preparation, and he told them an analysis was not a recipe; they were two very different things. But they did not know that. The analysis came first, and when the ingredients were fixed then came the trouble of finding out how it was to be made on a large scale. It was a question of making an experiment. Judge Lumley Smith: You told him it would cost him a great deal of money? Plaintiff: I told him it was very difficult, and I went through seventeen analyses. Judge Lumley Smith: That is guinea apiece for the analyses. Defendants' solicitor said they had had no analyst's report; it was only a certificate. The certificate, Dr. Lewkowitsch explained, showed that the composition submitted to him contained: Wool-grease, 87 per cent.; still-residue, 12 per cent.; ash, 0.32 per cent.; and mirbane oil, 0.5 per cent. The wool-grease used was crude wool-fat containing 18 per cent. of free fatty acids. The still residue contained 1.66 per cent. of free carbon, the remainder being hydrocarbons. It was impossible to state without extensive, long, and protracted investigation, requiring very large quantities of material, whether the still-residue consisted solely of wool-pitch or a mixture of wool-pitch and still-residue from the distillation of high-boiling hydrocarbons. The ash consisted exclusively of iron oxide. The mirbane oil had been added to mask the unpleasant smell of wool-fat. It took him a full week with his assistant from Monday till Saturday, as well as the Sunday, to do the work. He did not say he worked the full week himself, because he attended to his other business. The fee of seventeen guineas was ridiculously small. In cross-examination, plaintiff said he had offered to take fifteen guineas before the action was brought, but he would not do it now. This was not the first time his fees had been disputed. There were people who thought he was a cab-horse on a rank—(laughter)—and he was not. He had succeeded in the other disputes. Judge Lumley Smith pointed out that everybody would know that plaintiff was an expensive man if his fees had been disputed. The defence was that it was arranged with the plaintiff over the telephone that the fee should not exceed five guineas. Evidence was called in support of this statement, and Mr. C. E. Cassal was called for the plaintiff to rebut the defendants' suggestion that the fee sued for was too much. Ultimately his Honour said he thought plaintiff was entitled to his seventeen guineas and costs. Judgment accordingly.

High Court Cases.

Unless otherwise stated these cases have been heard in the High Court of Justice, London.

COSLETT ANTI-RUST PATENT.

The hearing was concluded by Mr. Justice Neville in the Chancery Division on May 22 of the action brought by the Coslett Anti-Rust Syndicate, Ltd., of Temple Row, Birmingham, against Mr. Donald William Lennox, Sterling Works, Coventry, for an injunction restraining an alleged infringement of their patent No. 8667 of 1906 for a process for treating iron and steel so as to prevent oxidation and rust. Mr. Justice Neville held that there was no licence, and granted the injunction asked for, with costs and an inquiry as to damages.

Sale of Food and Drugs Acts.

CAMPHORATED OIL.

At the Stafford Borough Police Court before the Mayor (Mr. E. W. Taylor) and Messrs. J. H. Croudace and

W. Salisbury on May 16, William Francis Fowke (trading as Fowke & Son), chemist and druggist, 18 Market Square, Stafford, was summoned for selling camphorated oil which was certified by the county analyst to contain 12 per cent. of mineral oil. The preparation had been sold at defendant's branch shop in Browning Street by John Babington, the manager, who was also summoned. Mr. S. Watson, who appeared for the defence, and pleaded guilty, read a letter from Babington to Mr. Fowke, in which he explained that he had inadvertently used some "gallipoli oil" along with the olive oil in making the preparation. This was confirmed by Mr. Fowke in the witness-box. Babington was then charged with selling the adulterated drug, and pleaded guilty. Mr. E. W. H. Knight (Chief Inspector of Food and Drugs), who prosecuted, said Mr. Fowke deserved sympathy, and he was willing to withdraw the proceedings against him on payment of the costs. He asked the Bench to convict Babington. The Bench agreed to the course suggested in regard to Mr. Fowke, and Babington was fined 1*l.*, and costs.

LIMITED COMPANIES.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

COOKE, TWEEDALE & LINDSAY, LTD. (P.C.).—Capital 5,000*l.* Objects: To carry on the business of chemical manufacturers and merchants, drysalters, dealers in drugs, chemicals, and chemical products, and to adopt an agreement with A. S. Cooke. R.O., George Leigh Street, German Street, Manchester.

D. D. D. CO., LTD. (P.C.).—Capital 2,000*l.*, in 1*l.* shares. Objects: To take over the recipes and processes and rights of manufacturing and dealing in certain medicinal preparations known as the "D. D. D. Preparations," and to carry on the business of chemists, druggists, drysalters, oil and colour men, etc.

DELEOL, LTD. (P.C.).—Capital 1,500*l.*, in 1*l.* shares. Objects: To carry on the business of dealers in and agents for the sale of chemicals, drugs, perfumes, dental and toilet appliances, etc. The first subscribers are: G. E. Medhurst, accountant; and J. Green, financier. R.O., 5 Draper's Gardens, E.C.

LAVOLA, LTD. (P.C.).—Capital 5,000*l.*, in 1*l.* shares. Objects: To take over the business of a manufacturer of and dealer in soap insecticide and similar articles carried on by W. H. Murray at various places in London, together with patent No. 21,165 of 1910. The first directors are J. M. Brace, W. S. Stevens (managing director), and E. F. Wells.

T. LAUDER & CO., LTD. (P.C.).—Capital 2,000*l.* Objects: To carry on the business of manufacturing chemists, drysalters, paint and colour manufacturers, distillers, etc., and to adopt an agreement with T. Lauder, Pendleton, Manchester, manufacturing chemist, one of the first directors. R.O., Bazaar Street, Ford Lane, Pendleton, Manchester.

SELEMY INTRODUCTION SYNDICATE, LTD. (P.C.).—Capital 10,000*l.* Objects: To acquire from H. C. Joye and C. Denison the benefit of a certain invention or secret manufacture known as "Semely," to deal in "Semely" preservatives, oils, medicines, soap, and other substances, fats, greases, etc. The first directors are Com. the Hon. C. A. Denison, C. Denison, and H. C. Joye (managing). R.O., Saracen House, Snow Hill, E.C.

ALFRED WHALLEY, LTD. (P.C.).—Capital 1,000*l.* Objects: To take over (1) the pharmacy carried on by A. Whalley at 16 Washway Road, Sales, Ches.: and (2) the business carried on by J. Morrey at Church Street, Newton Heath, Manchester, as the "Church Street Drug-stores." The first directors are A. Whalley (chairman and managing director), G. Dennis, and J. Morrey. Qualification, 50*l.* R.O., 314 Corn Exchange Buildings, Hanging Ditch, Manchester.

Company News.

FLEETWOOD CHEMICAL CO., LTD.—Mr. E. J. Deane, 14 Dale Street, Liverpool, was appointed receiver on May 6.

CASTNER-KELLNER ALKALI CO., LTD.—The directors have declared an interim dividend at the rate of 15 per cent. per annum for the six months ended March 31, 1912.

COMPANIES' REGISTER.—By a notice gazetted on May 21, the undermentioned joint-stock companies will, unless cause be shown to the contrary, be struck off the register at

Somerset House after the expiry of three months: Impregnated Tooth-brush Co., Ltd.; K. C. Soap and Polish Co., Ltd.; National Radium Trust, Ltd.; National Soap Co., Ltd.; Radium Specialities, Ltd.; Vitæearnis, Ltd.; Vivo Vibrator Co., Ltd.

BRUNNER, MOND & CO., LTD.—The report for the year to March 31, 1912, states that the accounts show a balance to the credit of profit-and-loss account of 766,126*l.*, which with 36,676*l.* brought forward makes a total of 802,802*l.* The directors recommend an interim half-yearly dividend on the preference capital at 7 per cent. per annum, 27,249*l.*; dividend now to be paid on the preference capital at 7 per cent. per annum, 37,960*l.*; interim half-yearly dividend on the ordinary capital at 25 per cent. per annum, 245,358*l.*; dividend now to be paid on the ordinary capital, making 27½ per cent. for the year, 326,513*l.*; amount to be placed to suspense account, 100,000*l.*; amount to be written off patents account, 2,500*l.*; balance to be carried forward, 63,220*l.*

GERMAN CHEMICAL DIVIDENDS.—The J. D. Riedel Co., of Berlin, announce a dividend of 4½ per cent. on the preference shares, 12 per cent. on the old and 6 per cent. on the new shares.—The Chemical Works, formerly H. & E. Albert, in Amoeneburg, are distributing a dividend of 30 per cent., as compared with 32 per cent. last year.—The Griesheim-Electron Chemical Works, Frankfort-on-Main, made a net profit of 2,959,046*m.*, against 2,967,651*m.* in 1910, and again propose a dividend of 14 per cent. The capital is being increased from 14,000,000*m.* to 16,000,000*m.*—The Chemische Fabriken vorm. Weiler-ter-Meer, Uerdingen, is again paying 12 per cent.—The Farbwerk Muhlheim vorm. A. Leonhardt & Co., Mühlheim-on-Main, made a net profit of 32,209*m.*, against 44,958*m.* in 1910. The whole amount is placed to reserve, as last year, no dividend being paid.

STORTON, LTD., Perfumers, Grove Road, Northampton.—At a meeting of the creditors, held at Northampton on May 13, Mr. H. C. Palmer (Messrs. A. C. Palmer & Co., accountants) presented a statement of affairs which showed a deficiency of 5,706*l.* 2*s.* 2*d.*, due to losses incurred during the past four years, together with amounts written off book debts, machinery, stock, and goodwill. The proprietary articles and goodwill, which, according to the books, were worth 1,543*l.* 3*s.* 7*d.*, were estimated to produce by forced realisation only 50*l.* The liabilities were 1,232*l.* 0*s.* 9*d.*, leaving a deficiency as regards creditors of 1,196*l.* 2*s.* 2*d.*, and as regards shareholders, 4,510*l.* After discussion, it was decided to leave the matter in Mr. Palmer's hands for the debenture-holders, to realise to the best advantage, and, failing an offer for the business as a going concern, to dispose of it by auction or otherwise. Should there be any surplus on realisation above the amount required by the debentures, preferential claims, and costs, it will be available for distribution among the creditors.

THE "SANITAS" CO., LTD.—The report for the year ended March 31 states that in spite of the loss and inconvenience caused by the railway, dock and colliery strikes, the business of the company has made excellent progress. The balance to credit of profit-and-loss account, after charging all outgoings, including advertising, and adding the amount brought forward from last account, amounts to 21,033*l.* From this sum 3,484*l.* has been paid as interim dividend, leaving, after payment of income-tax, directors' fees, and interest on debentures, a balance of 15,406*l.* The directors recommend a final dividend of 5 per cent. (making, with the interim dividend already paid, a total distribution of 7½ per cent. for the year), to place to reserve the sum of 2,500*l.*, to contingencies account the sum of 2,700*l.*, and to carry forward a balance of 3,238*l.* to the next account. The thirty debentures of value 3,000*l.*, shown as outstanding in the last year's accounts, have been since redeemed. The retiring director, Mr. R. M. Cunningham, being eligible, offers himself for re-election.

DEEDS OF ARRANGEMENT.

Fulford, Arthur, trading as A. Fulford & Co., 52 Wadborough Road, and residing at 10 St. Thomas Street, Sheffield, Wholesale Druggist.—Trustee: C. Turner, Sheffield, C.A. Dated, May 10; filed, May 16. Secured creditors, 13*l.*; liabilities unsecured, 253*l.*; estimated net assets, 200*l.* The creditors include: Shirley Bros., Ltd. (25*l.*); North British Rubber Co., Edinburgh (13*l.*); Cussons, Sons & Co., Manchester (14*l.*).

Evans, John Owain, 27 Stratton Ground, Westminster, and 87 Claverton Street, London, S.W. Chemist.—Trustee: H. Morgan, 62 London Wall, London, E.C. Dated, May 10; filed, May 16. Secured creditors, 529*l.*; liabilities unsecured, 1,468*l.*; estimated net assets, 203*l.* The creditors include:

Mrs. J. Owain Evans (579*l.*); J. James (226*l.*); British Drug-stores (30*l.*); South African Oil Co., Ltd. (231*l.*); Maikop Apscheron Oil Co., Ltd. (150*l.*).

Brown, Robert Thomas, Centre House, Market Place, Bridlington, described as Druggist.—Trustee: J. H. R. Hermon, Bridlington. Dated, May 14; filed, May 20. Secured creditors, 1,235*l.*; liabilities unsecured, 1,050*l.*; estimated net assets, 370*l.* Among the creditors are: The British Drug Houses, Ltd. (24*l.*); Blundell, Spence & Co., Ltd., Hull (31*l.*); Lofthouse & Saltmer, Ltd., Hull (41*l.*); Drummond & Son, Stirling (570*l.*); Bleasdale, Ltd., York (28*l.*); Raimes & Co., York (45*l.*).

GAZETTE.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

McCarthy, W. A., West Green Road, South Tottenham, chemist and druggist.

ADJUDICATION.

Humphreys, E. A., lately Rarewood Hall, Broadbottom, Chester, now George Street, Cheetham Hill, Manchester, physician.

BIRTH.

SILVER.—At Anselm, Kettering, Northants, on May 20, the wife of R. D. Silver, pharmacist, of a daughter.

MARRIAGE.

Wood—Causton.—At St. Peter's, Brockley, London, S.E., on May 23, by the Rev. C. H. Grunday, Alec Vincent Wood, eldest son of Mr. Vincent Wood, Victoria House, London, S.E., to Hilda Muriel, daughter of Mr. Wallace C. Causton, of St. Albans, Brockley.

DEATHS.

Belfield.—At Catherine Street, Ashton-under-Lyne, on May 15, Mr. Wm. Belfield, chemist and druggist, aged seventy-eight. Mr. Belfield was ill for only a few days. He was in business for a long period in Victoria Street and Stamford Street, Ashton, retiring in 1894.

Breeze.—At 10 College View, Plymouth, on May 14, after a prolonged illness, Mary Jane, the wife of Mr. Geo. Breeze, J.P., chemist and druggist, formerly of Devonport, aged eighty-two.

Brown.—Recently, Mr. Robert Brown, who had for many years a retail drug-shop at High Row, Darlington, aged seventy-three.

Burgess.—At Bostock Farm, Jack Lane, Davenham, near Northwich, on May 2, Mr. William Burgess, chemist and druggist, formerly of 64 Whitechapel, Liverpool, aged fifty-three. Mr. Burgess had to give up his splendid business in Whitechapel, Liverpool, owing to ill-health, forsaking pharmacy for farming, some eight years ago. Mr. Burgess is a brother of Mr. T. Burgess, chemist and druggist, 12 Fouberts Place, Regent Street, London, W. The funeral took place on May 7.

Frith.—At Coggeshall, Essex, on May 18, Matilda, wife of Mr. J. Bruff Frith, chemist and druggist, Coggeshall, aged fifty-eight. She leaves a family of three sons and three daughters, one of her sons being Mr. J. Benjamin Frith, chemist and druggist, High Street, Rochester.

Hellett.—At 5 Lewes Road, Brighton, on May 17, Mr. Frederick Charles Hellett, chemist and druggist, aged forty. On August 22 last Mr. Hellett broke an arm while waiting on Lewes station platform, and, in spite of amputation of the limb, did not recover. The funeral took place at Kensal Green Cemetery on May 21 amid many manifestations of general sympathy.

Hough.—At "Malvern," Wigan Lane, Wigan, recently, Mr. Richard Hough, aged seventy-four. Mr. Hough was connected with Messrs. Hough, Hoseason & Co., manufacturing chemists, Manchester and Pendleton.

JACKSON.—At Golden Hill Terrace, Leyland, Lancs, on May 15, Mr. Thos. Jackson, chemist and druggist. Mr. Jackson was, until about four years ago, in business in Hough Lane. Previously to 1894 he was at Euxton.

PRIDMORE.—At Castle Street, Hinckley, on May 19, Mr. William Pridmore, chemist and druggist, aged eighty-two. Mr. Pridmore had been associated with pharmacy in Hinckley for over sixty years, and although his health had been visibly declining for some time, he persisted in attending to his business to the last. Many quaint anecdotes are related of his remarks to customers who inadvertently referred to the question of store-prices, but his reputation for the treatment of slight ailments was widely known. The death of his son some time ago affected him deeply and accentuated the loneliness of his old age.

REED.—At 36 Catherine Street, Devonport, on May 13, Frances Amelia, wife of Mr. John Reed, chemist and druggist, aged thirty-five.

ROBERTS.—At St. Asaph, Flints, on May 15, Mr. Peter Roberts, Ph.C., aged eighty. Mr. Roberts was a Justice of the Peace for Flintshire, and had acted as Treasurer of the North Wales Calvinistic Methodist Association.

SMEE.—At 18 Court Lane, Dulwich Village, London, S.E., Mr. Walter Wallis SMEE, Ph.C., aged forty-eight. Mr. SMEE passed the Minor examination in 1884 and the Major in 1886. The funeral took place at Camberwell Cemetery, Forest Hill, on May 23.

SPRACKETT.—At Rydal Mere, St. John's Terrace, Weston-super-Mare, recently, Mr. George Sprackett, chemist and druggist, aged ninety-three. Mr. Sprackett was formerly in business at Bristol and Martock. His wife died thirteen days previously.

WATT.—At Southminster, on May 17, Mr. Robert John Watt, chemist and druggist, 55 Lower Addiscombe Road, Croydon.

WILLS PROVEN.

MR. GEORGE BRIGHT. chemist and druggist, Clydesdale, Sea View, Isle of Wight, who died on April 20, left estate valued at 475*l.*

MR. JOHN PATTINSON. analytical chemist, Shipcote House, Gateshead, who died on March 28, left estate in the United Kingdom valued at 58,071*l.* gross, with net personality 57,930*l.*

MR. GEORGE ARTHUR MARSHALL. Deerhurst, Farnan Road, Streatham, London, S.W., of Messrs. Marshall & French, Great Tower Street, E.C., who died on April 15, intestate, left estate of the gross value of 5,674*l.* 13*s.* 9*d.*, with net personality 4,081*l.* 10*s.* 7*d.*

MR. SAMUEL JAS. CAPPER. chemist, Victoria Street, Huyton, partner in the firm of Messrs. Thompson & Capper, Liverpool, who died on January 21, left estate of the gross value of 10,156*l.*, with net personality 7,639*l.* Probate of his will has been granted to his sons, Mr. Edmund Capper, 71 Evington Road, Leicester, surgeon, and Mr. Arthur Capper, 141 Seabank Road, Liscard, Cheshire, dental surgeon.

MR. THOMAS PERKINS ILIFFE. Ph.C. Church Street, Nuneaton, who died on February 11, left estate of the gross value of 9,348*l.* 18*s.* 9*d.*, of which the net personality has been sworn at 5,057*l.* 12*s.* Probate of his will has been granted to his widow Mrs. Fanny Lydia Phoebe Iliffe, his son Mr. Frank Nowell Iliffe, mining engineer, and his brother Mr. George Iliffe, Ph.C., Market Place, Nuneaton. The testator left nineteen guineas and the option of the purchase of his partnership share in his business as a chemist for 100*l.* to his brother George Iliffe.

The exports of kauri gum from New Zealand in 1911 amounted to 7,587 tons, valued at 395,707*l.*, against 8,662 tons, valued at 465,044*l.*, in 1910.

The exports of chemicals, drugs, etc., from Baltimore during 1911 were valued at 18,731*l.*, against 22,126*l.* in 1910 and 12,518*l.* in 1909. France and Germany were the principal customers last year.

The Shops Act, 1912.

The regulations made by the Lord Lieutenant of Ireland have been published as No. 454 of Statutory Rules and Orders, 1912, and may be obtained at 1*d.*

Irish Regulations.—through any bookseller or from E. Ponsonby, Ltd., 116 Grafton Street, Dublin. The pamphlet differs in certain respects from the similar regulations issued by the Home Office in England. It begins with "Interpretation," under which it is stated that the regulations "do not apply to rural districts in Ireland or towns within such districts save so far as the same relate to any powers by the Act vested in any Town Commissioners." In regard to the assistants' weekly half-holiday, the prescribed form of notice is the same as in England; but there is also another form of notice for assistants in shops in which the business of the sale by retail of intoxicating liquors is carried on. In this form the days of the week are set forth, and the form is in other respects quite different. In this case there may be either a "morning half-holiday" or "afternoon half-holiday." This notice will be required by pharmacists and druggists who have wine or other liquor licences. The notice must be affixed in the shop before the assistants to whom it relates cease work on the Saturday preceding the week during which it is to have effect. The regulations proceed to deal with "employment overtime" in licensed premises and inquiries by local authorities as to orders fixing the day on which shops are to be closed for the weekly half-holiday. The conditions for mixed shops are the same as in England (a notice has to be exhibited inside and another outside the shop), and the Section 4 notice, which we publish (two copies 3*d.*, or 3*s.* 6*d.* per dozen, post free), meets the requirements of those who desire to serve customers during closing hours; but in Ireland it is provided that nothing contained in the regulation shall affect any shop in which the sale by retail of intoxicating liquors is carried on in conjunction with any other trade or business. So it follows that pharmacists and druggists who have wine-licences are not required to exhibit the notice. The regulations then proceed to deal with closing orders, ascertaining the opinion of occupiers of shops, and so on, precisely in the same terms as the English regulations, except as regards licensed premises, in respect to which a register of "employment overtime" is required, and the form for this is provided in the schedules. We suggest that shopkeepers in Ireland who are interested should obtain a copy of the regulations.

We have received a communication from the Early Closing Association in which the following passage occurs:

Bank Holidays.—The Association has in former years successfully obtained agreements among principal retail firms in and around London granting the concession of half-holidays as usual during Whitsuntide and August. Opponents of the concession are this year shielding themselves under Section 5, Clause 4, Act 1912, which authorises no half-holiday closing on the date preceding or following a bank holiday. Some difficulty is thus being experienced in securing general observance of the Whitsun half-holiday. Unless the Association's hands are strengthened it would seem that shops will be open in many quarters as usual."

Section 5, Sub-section 4, of the Act refers to closing orders not applying to exempted trades of the Third Schedule. Section 4, Sub-section 5, is as follows:

Where a shop is closed during the whole day on the occasion of a bank holiday, and that day is not the day fixed for the weekly half-holiday, it shall be lawful for the occupier of the shop to keep the shop open for the serving of customers after the hour at which it is required under this section to be closed either on the half-holiday immediately preceding, or on the half-holiday immediately succeeding, the bank holiday.

This is the corollary to the exemption provided in Section 1 for assistants' half-holidays, viz.:

This provision shall not apply to the week preceding a bank holiday if the shop-assistant is not employed on the bank holiday, and if on one week-day in the following week in addition to the bank holiday the employment of

the shop-assistant ceases not later than half-past one o'clock in the afternoon.

We see nothing to grumble at in these provisions. Shopkeepers and their assistants, in common with other employers and employés, recognise that extra work has always to be done in anticipation of holidays. The Early Closing Association is a trifle presumptuous in the matter, and might be more careful in its statements. "Section 5, Clause 4," is absurd, particularly so of a body which actually asked the Home Secretary to entrust the administration of the Act to it!

We append news and notes regarding local arrangements. Parliamentary questions are dealt with under "Westminster Wisdom."

Bath.—As a result of last week's deputation to the Sanitary Committee (*C. & D.*, May 18, index folio 741), a new petition was presented to the Town Clerk on May 21, asking for an order for closing on Thursday at 1 p.m., or on Saturday at the same hour. The petition is signed by twenty-seven members of the trade, who represent thirty-four establishments.

Bexhill-on-Sea.—The Town Council have decided to grant the chemists' petition for a closing order (*C. & D.*, May 11, index folio 692).

Bury (Lanes).—In a draft closing order issued by the local Town Council for closing on Tuesdays at 1 p.m., dealers in chemicals and photographic goods are included, but not chemists and druggists.

Carlisle.—The Town Clerk has intimated that a closing order for chemists is unnecessary, as by common consent their pharmacies are closed on Thursday afternoons.

Cheadle and Gatley.—The Urban Council on May 15 received a request from Messrs. F. H. Boden, Ph.C., and T. & W. Woodruff, chemists, for a closing order on Wednesdays at 1 p.m. for shops in the district where medicine and medical and surgical appliances are sold. The Clerk said no order was necessary, as both applicants were agreed. The Council, however, decided to refer the matter to the Cheshire County Council.

Chesterfield.—Chemists have applied for a closing order for the following hours: Mondays, Tuesdays, Thursdays, and Fridays, 7.30 p.m.; Wednesdays, 1 p.m.; and Saturdays, 10.30 p.m. The Town Council has deferred action pending applications from other trades, with a view to including all in one order.

Clitheroe.—The Town Council has been memorialised by the town chemists in favour of Wednesday for half-holiday under the Shops Act.

Ealing.—Fifteen chemists in this London district are closing at 1 p.m. on Wednesdays, except for the sale of medicines, etc.

Edinburgh.—A sub-committee, which has been considering applications for closing orders, has reported on May 15 to the Lord Provost's Committee. The petitions were divided into three classes. Class A included petitions for exemption as a holiday resort. It was recommended that the request of Portobello shopkeepers be granted, but that no action should be taken upon the request from tradesmen in the centre of the city. Class B, for exempted traders who desire to be included under the Act, covers a petition from 121 occupiers of shops where the sale of medicines, etc., is carried on. Class C, consisting of applications for exemption orders, contains petitions from chemists in Princes and adjoining streets and in the West End. In regard to chemists, the Committee states: "Chemists are exempt from the Act only for the sale of medicines, drugs, etc. In view of the fact that one section desires complete exemption from the statute, and another desires to be brought under the half-holiday closure, arrange for a meeting with petitioners, with a view to settlement." The local Press has been enlarging upon the difficulties of chemists re sales on early-closing day, "When is soap not soap?" and similar conundrums being given prominence.

Falmouth.—The Town Council's General Purposes Committee reported on May 16 that an application had been received from a two-thirds majority of the chemists and druggists asking for compulsory closing of chemists' shops on Wednesdays at 1 p.m. The Council decided to issue notice of its intention of making the order.

Glasgow.—At a meeting of the Glasgow Trades Council on May 15, a motion that the Secretary be instructed to protest to the proper authority against the closing of all chemists' shops on the same afternoon was defeated, an amendment to the contrary being carried by thirty-six votes to thirty-five.

Gosport.—The Urban Council has deferred the chemists' half-day closing petition pending the appointment of an inspector under the Act.

Hamilton.—The following local chemists and doctors have arranged to open their shops on the monthly holidays from 9.30 a.m. till 12 o'clock noon: A. Brownlie, John Kerr, D. C. Douglas, The Burnbank Apothecary Co., J. Stewart, J. T. Hogg, B. Reekie, J. Lohoar, W. Nicol.

Harrogate.—The Town Council has issued a draft order for half-day closing on Wednesdays at 1 p.m., with closing on Saturdays at 1.30 p.m. as an alternative. Exemption from half-day closing is to be given from June 15 to October 15. Chemists will be included in the order. During the discussion by the Council on May 20, Dr. Williams raised the point as to what was covered by the terms "medicine" and "medical appliances." He said almost everything in a chemist's shop was a necessity. As there was the necessary majority in favour of an order, the Council decided to issue one.

Leeds.—The following have announced their intention of closing their establishments on Saturday afternoons: Mr. W. Hammond, White Horse Street, Boar Lane; Boots, Ltd., Bond Street; and Reynolds & Branson, Ltd., Commercial Street.

Lichfield.—Chemists have announced that on and after June 3 they will close their pharmacies at 1 p.m. on Wednesdays; at 7 p.m. on Mondays, Tuesdays, Thursdays, and Fridays; and at 9 p.m. on Saturdays.

London.—There is every indication that the London County Council will have to undertake the administration of the Shops Act, instead of delegating its powers to the Borough Councils, as originally proposed. The County Council's Public Control Committee reports that, in view of the nature of the replies received from the Borough Councils (*C. & D.*, May 18, index folio 741), the Committee feels that the Council cannot hope to formulate a scheme likely to be acceptable to the Home Secretary. Although the Committee is still of opinion that the Council's proposals regarding delegation would in no way jeopardise the interests of those concerned, the Committee sees no alternative, having regard to all the circumstances, but to ask the Council to reconsider its decision. The Council did so at this week's meeting, and decided to call a conference of Borough Councils.

Lowestoft.—The Town Clerk has been instructed to obtain the necessary proofs that a *prima facie* case exists in connection with applications he has received from chemists in the borough for early closing on Thursdays from 1.30 to 6.30 p.m., opening from 6.30 to 8 p.m. for the sale of medicines and surgical appliances only; and also for exemption during July, August, September, and October.

Manchester.—The closing order which a majority of chemists are agitating for has not yet been granted. The many pharmacists who have observed Wednesday half-day closing are generally of opinion that Thursday's business has made up for the loss on the previous afternoon.

Morley (Yorks).—The local chemists have voted in favour of closing on Wednesdays at 1 p.m.

Ryde.—The Town Council on May 14 decided to take steps to comply with the pharmacists' request for an order for closing on Thursdays at 1 p.m.

Sheffield.—At a special meeting of the local Pharmaceutical and Chemical Society Thursday was decided upon as the early-closing day. A suggestion to obtain an order for the closing of all shops at 7 p.m., except on Saturdays, was defeated on the ground that it would be no change from the present conditions.

Southend-on-Sea.—Mr. J. H. Heywood, Ph.C., J.P., High Street, has been appointed to secure signatures from pharmacists to a petition for a closing order for half-day closing, with no exemption during the summer months (*C. & D.*, May 11, index folio 692).

Stratford-on-Avon.—The Town Council on May 14 referred to a special committee a petition from Mr. C. F. Loggin and Mr. J. G. Danee (representing two-thirds of the town chemists) for a closing order. The hours mentioned are: Thursdays, 1 p.m.; Mondays, Tuesdays, and Wednesdays, 7 p.m.; Fridays, 8 p.m.; and Saturdays, 9 p.m. Exemption is asked for the supply of medicines and surgical appliances.

Weston-super-Mare.—The chemists are applying for a closing order for Thursdays at 1 p.m., except during August. The Urban Council is having a register of traders prepared in order to ascertain if there is the necessary majority in favour of the order.

Russian Chamomiles.—Among the exports from Poti, Russia, during 1911 were 75 tons of chamomiles.

WESTMINSTER WISDOM.

The Week in Parliament.

METHYLATED SPIRIT FOR MOTORS.

Mr. Fetherstonhaugh asked the Chancellor of the Exchequer on May 21 whether, having regard to the price of petrol caused by trusts and combinations of the producers, he will consider whether steps should be taken to enable commercial alcohol to be used as fuel for internal-combustion engines and to alter the duty so that this could be done.—In reply, the Chancellor referred him to the report of the Industrial Alcohol Committee of March 23, 1905.

VERIFICATION OF THE STANDARDS.

It is officially announced by the Office of Works that it is hoped to arrange for an examination of the standard weights and measures in the House of Commons shortly after the Whitsuntide recess. The "Parliamentary copies," as they are termed, are interred in the wall of the staircase leading to the Upper Waiting Hall of the House of Commons (on the way to the Committee room where the Patent-medicines Inquiry is conducted). The last examination took place in 1892 during the Speakership of Viscount Peel.

OPIUM-PRODUCTION.

Mr. Acland informed the Earl of Ronaldshay, M.P., in the House of Commons on Monday, May 20, that reports had been received that opium-cultivation is proceeding in certain Chinese provinces over which the Chinese Government are unable to exercise in the present circumstances any effective control. H.M. Government, however, are confident that with the full restoration of order the Chinese Government will take the necessary steps to ensure the enforcement of the suppression of the cultivation of opium.

GOVERNMENT CHEMISTS.

In the House of Commons on Wednesday, Mr. Gretton asked the Secretary to the Treasury if he is aware that there is much anxiety among civil servants as to the report of the Departmental Committee on the chemical and laboratory staff serving the Customs and Excise; if the Committee has reported; and, if so, will he cause the report to be laid upon the table of the House.—Mr. Masterman wrote in reply: The answer to the first part of the question is in the negative. The Committee reported nearly two years ago, and I do not think any useful purpose would be served by presenting their report now in view of the considerable changes which have since taken place.

TUBERCULOSIS DISPENSARIES.

Replying to Mr. Charles Bathurst, on Wednesday, regarding the proposed provision of tuberculosis dispensaries, Mr. Masterman stated that the Tuberculosis Committee's report explicitly recognises the necessity of a greater number of dispensaries in proportion to population in rural districts. It is not contemplated that tuberculosis dispensaries should be established for the provision of treatment for insured persons only. They are intended to meet the requirements of the whole population, and in so far as others than insured persons and their dependents are treated, it is obvious that the cost of such treatment must be borne by the authorities or persons who refer them to the dispensary for treatment.

RECTIFIED-SPIRIT LICENCES.

Replying to Mr. Worthington-Evans in the House of Commons on May 22, Mr. Masterman, on behalf of the Chancellor of the Exchequer, stated that no licences under Section 9 of the Finance Act, 1911, were issued during the financial year 1911-12 [*i.e.*, 10^l. rectified-spirit licences]. Ordinary spirit retailers' off-licences were necessary for the sale of spirits for medicinal purposes prior to the passing of the Finance Act, 1911, and those taken out are still current. They are not distinguished from licences of the same description taken out for the sale of ordinary potable spirits, and I am, therefore, unable to state in respect of how many licences for the sale of spirits for medicinal purposes issued during the year the duty of

50^l. was charged. As regards the last part of the question, I am advised that the Section referred to has no retrospective effect.

THE SHOPS ACT.

In the House of Commons on Monday, May 20, Mr. Acland Allen was informed by the Home Secretary that the London County Council could delegate its powers and duties under the Act to the borough councils only by an arrangement made with his approval under Section 13. No such arrangement has been made, and in its absence the responsibility for the administration and enforcement of the Act rests with the Council, on whom it is placed by statute. The requirement as to the closing of shops for the weekly half-holiday does not depend on any order being made by the Council, and is already in force, and he had no information to show that the requirement is not being duly observed.—Replying to Mr. O'Grady at the same time, the Home Secretary stated that he has no information about the Leeds Watch Committee having decided to take no action in enforcing the Shops Act for another three months, or that the Act is in many cases being disregarded. He is to inquire into the matter.

Captain Jessel asked the Home Secretary on Wednesday, May 22, whether his attention has been called to the complaints of those chemists who, keeping a single assistant, are permitted to sell medicines which are urgently required, but are prevented from selling anything else under the Act; whether his attention has been drawn to the fact that if a chemist keeping a single assistant goes away on a holiday for a fortnight he is bound to give his assistant two half-holidays, and is thereby compelled to employ another assistant, who may not be acquainted with the requirements of the business; and whether he could see his way to introduce legislation for the purpose of amending the Act.—Mr. McKenna has written in reply: I cannot trace any complaints on this point; and, as at present advised, I do not think any case is made out for amending the provisions of the Act.

Patent-medicines Inquiry.

THE next meeting of the Select Committee of the House of Commons will be held on June 6, two days after the reassembling of the House of Commons after the Whitsuntide recess. It is expected that further evidence of an official character will then be called.

An alteration has been made in the personnel of the Committee, the Master of Elibank, M.P., having given notice that Mr. Marshall Hall be discharged from the Select Committee and that Mr. Norman Craig, M.P., be added thereto. It is stated that Mr. Marshall Hall's withdrawal from the Committee's deliberations is due to pressure of legal and other work.

Last Week's Evidence.

The evidence given by Mr. G. C. Aitken, of the Home Office, after luncheon on Thursday, May 16, is appended. It will be remembered that his evidence was interrupted before luncheon in order that Dr. Nestor Tirard, who had a pressing engagement elsewhere, might tell the Committee about the relation of the British Pharmacopœia to proprietary medicines.

Mr. Aitken having been recalled, Mr. Lynch asked him: Is there any official of the Home Office who exercises an active vigilance with regard to frauds perpetrated on the public?—The Home Office can only wait until they get information from one source or another.

Can you say what particular papers have refused advertisements of the kind to which you referred?—No; I know of no specific instance. Mr. Aitken further suggested that it might be possible to legislate somewhat on the lines of the Sale of Food and Drugs Acts, giving perhaps the local authorities, the Home Office, or some other body powers and duties to examine patent medicines.

Mr. Lynch: It does not appear to be the business of any official to look actively into the matter of the sale of patent medicines for illegal purposes?—The Secretary of State is meditating some legislation on the subject.

The Chairman: For two years.

Witness: That is due to the difficulty of getting an inordinate number of Bills through Parliament.

Mr. Lynch: Do you think it possible to frame a Bill which would meet the evil of defrauding the public by selling at fairly high prices worthless medicines? (The answer was not audible.)

Mr. Lynch: Is there any tendency for officials not to act unless moved?—Very often they are very active.

In reply to Dr. Chapple, the witness said the Home Secretary did not institute a prosecution. He would consult the police of a district, get them to report, and if they said there was enough evidence to justify a prosecution he would accept their view. He might, however, at times put pressure upon the police to secure a prosecution. It did not at all follow that because prosecutions were rare evils did not exist.

Your Department realises that grave evils exist both with regard to proprietary medicines and medicines for illegal purposes?—Yes.

But you find yourself powerless to deal with them?—Yes, to a great extent.

In reply to Mr. Lawson, the witness said it was possible under the existing law to prosecute where there was *prima facie* evidence of fraud, but people would not prosecute unless they were sure of obtaining a conviction.

But there was a conviction in 1906?—Yes; but that was a very clear case of fraud.

Do you not think that prosecutions for fraud on a wider scale could be conducted?—We are advised both by the police and by the Director of Public Prosecutions that the difficulties are enormous.

FORMULA ON THE LABEL.

Would the amendment of the law in regard to the putting of the formula on the labels help you at all?—I do not think it would.

You have all the materials for prosecutions, but you do not care to prosecute?—No; the enormous difficulty of obtaining a conviction prevents us from taking action.

In the matter of preparations designed to procure abortion, do you always prosecute?—Yes, where we have a good case.

And the present law is quite sufficient to deal with cases of that kind?—Yes.

Do you think it would be an advantage to have all the matters connected with poisons centralised in one office?—I do not think it is practicable. Subjects overlap, and in the interests of economy of labour it is not always possible to prevent one aspect of the subject being dealt with in one office and another in another office. The Excise stamps must be dealt with in the Excise Office, for example.

So far as the Home Office is concerned, do you see no necessity for further legislation?—I do not say that as far as we are concerned I have mentioned one subject for legislation. As regards the more general question, I can only say that it is a matter on which the Home Office cannot offer suggestions to the Committee, for we have no administrative experience.

Mr. Newton: You have spoken of the difficulty experienced in obtaining convictions. Can you suggest anything which would make it less difficult to obtain convictions?—No; the difficulty is that many people believe they have been benefited, and evidence can be produced to that effect.

Can you suggest any amendment of the law which will make it easier to obtain convictions?—I do not think I can.

Suppose somebody wrote to the Home Secretary, sending a copy of a circular offering an absolute cure for rupture by an emulsion—every medical man says that is impossible—what would happen on the receipt of the letter?—We should probably send it to the Privy Council Office to deal with. (Laughter.)

Suppose that a man had parted with his money, would the Home Secretary take no action?—He would very likely consult the local police and get them to make inquiries into the allegation.

If the police reported that this man was offering this lotion for sale on those terms, what would probably happen?—The police would tell us whether they had received any other complaints, and it would largely depend on that whether they saw their way to promote a prosecution.

The Chairman: This is taking the form of a fishing inquiry. We are trying to get this information from an official source, and we find it difficult. We shall have to ask the Public Prosecutor to come and give evidence.

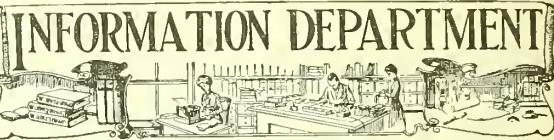
In reply to Mr. Glyn-Jones witness stated that they had no records at the Home Office of thousands of prosecutions which are taken by the police, and as regards proprietary articles only records of actions for false pretences.

The Chairman: Has the official analyst at the Home

Office ever been instructed by the Home Secretary to analyse patent medicines?—I think not.

Do you think it would be to the public advantage to have a general law on the subject of the sale of patent medicines?—Yes, I think it would.

The Committee then adjourned.



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C. & D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C.

Telegraphic Address: "CHEMUS LONDON."

Telephone No.: BANK 852 (two lines).

INFORMATION WANTED.

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries:

- 185/8. "Rennetine": makers.
- 180/14. Pips shampoo-powder.
- 180/12. "Onoto" mouth-wash.
- 180/900. "Medalin" skin-food.
- 182/30. "Quinzoine": suppliers.
- 185/101. "Mothine": suppliers.
- 180/902. "Unknown" ointment.
- 180/9. "Sepoyle" oil: suppliers.
- 183/64. "Bronkshall": what is it?
- 185/13. Paper towels: actual makers.
- 183/69. "Crynoil," an iodine preparation.
- 181/41. "Cibbulacter Food for children."
- 182/37. Canfield's "Sweet Pea" bath-soap.
- 180/13. "Crème Nerol": makers or suppliers.
- 185/55. Ray's "Lily and Rose Powder, No. 8."
- 185/63. "Thymo-phthalain": makers or supply.
- 185/10. "Müller's Specific" (London suppliers).
- 182/31. "Revivules" (in glass capsules): makers.
- 185/550. Junger & Giberhart's Mund Wasser: supply.
- 180/901. Louis Langa's brilliantine (London agents).
- 184/65. Makers of lacquered tin capsule-boxes (3 in. by 3½ in. by 5 in.), with four holes perforated on each side.

INFORMATION SUPPLIED.

During the past week we have answered inquiries as to the makers or sellers of the following articles. The information will be repeated to other inquirers who send to this Department a stamped and addressed envelope for the purpose.

- "Adora" soap, 179/36
- Aereel wash-cloth, 184/11
- "Ako" (liquid depilatory), 182/330
- Alizarine neutral red, 183/630
- "Apcel" (South African inquiry), 184/14
- Ayle's Isle of Wight Bee-disease cure, 177/45
- Barclay's atomiser, 178/74
- Breeze's "Heat Sun Poker," 182/56
- Broughton's lotion, 185/101
- Canthrax, 184/68
- Chemical apparatus (Manchester, Birmingham, and London), 182/29
- Cleaning wool (packed), 182/34
- Evenden's linctus, 179/72
- Gum Chicle (German inquiry), 183/8
- Hæmatogalolles, 183/69
- Klement's alpine-flower cream, 185/10
- Lavrol, 185/9
- Marienbad tablets, 182/32
- Marvis, 184/16
- Mercolised wax, 179/11
- Mist. pepsinæ co., 179/45
- "Nopur" suppositories, 185/100
- "Nurse Margery" Soothers, 179/12
- Pine-shampoo concentrated, 182/33
- "Red Cross" shaving-cream, 184/41
- Roger & Gallet's preparations (London address), 183/68
- Savarol, 185/900
- "Saxe" elastic wristlets, 172/23
- Schnoter's suspensors, 180/21
- Shop-round labeller, 183/54
- Stell's thirty pills, 176/22
- "Telmo" toilet specialties, 181/410
- Unfinished bottles (for penny lines), 184/56
- Vale's Roup-powders, etc., 179/45
- Williams' earbolic soap, 181/41
- Zahradnik (Bohemia), 170/44
- "Zit" nail-brushes, 174/54

ACCORDING to "Commercial America," there were in the year 1909 174 firms in Philadelphia manufacturing patent medicines and druggists' preparations, the number of wage-earners being 2,140 and the wages earned \$897,000. The value of the products manufactured was \$9,423,000, as compared with \$7,371,000 in 1904. The value of chemical products manufactured in 1909 was about \$45,000,000.

OBSERVATIONS & REFLECTIONS

By Kräyser II.

The Annual Meeting

of the Pharmaceutical Society produced nothing very noteworthy in the way of speeches. The President's address was a kind of general alexipharmacic, an antidote to the vague dissatisfaction which, rather than definite criticism of particular points of policy, seems just now to be the attitude of the trade towards the Society; or perhaps anxiety is a better word here than dissatisfaction. We are undoubtedly passing through a troublous time, and there is a disposition to leave the Society as free as possible to deal with its problems. Hitherto it has apparently dealt tactfully with the Insurance difficulty, but the President's reference to the doctors' attempt to usurp the position promised us under the Act is disquieting. If all we can do is to pass such resolutions as the one he so curiously describes as our "ultimatum," we are helpless indeed. In what sense is it an ultimatum?—and

An Ultimatum to Whom?

It simply expresses an opinion; it indicates no course of action that will be taken if the opinion is disregarded, and in the nature of the case it was impossible to do this. We can take no action either against the doctors or against the Government. The use of such "great swelling words," so entirely out of place, suggests the fear that our leaders are walking in a vain show, fighting the air. One is reminded of the Convention at Paris passing resolutions declarative of its freedom while Henriot and his hussars were barring its doors. The best thing in the President's address occurred (if the Hibernicism is allowable) in his reply—I mean his defence of the School of Pharmacy. It is right, and every way honourable to the Society, that "ideal pharmaceutical teaching" should be upheld, even at a money loss. Other directions might easily be pointed out in which economy could be practised without injury to anybody.

The Result of the Council Election

must have come as a most unpleasant surprise to the retiring Councillors. No one expected that Mr. Allen would be anywhere else than at the top of the poll, especially after Mr. Kirkby's rather melodramatic call to the electors to put him at the bottom, but that 36 per cent. of the voters should deliberately draw their pens through his name is indeed remarkable. It proves to a demonstration the depth of the feeling aroused by the recent Manchester episode and the tactless way in which it was handled after it occurred. If more than one-third of the electorate can be rendered positively hostile in less than six months, it will require careful steering if another third is not also perverted before next election. I congratulate Mr. T. A. White on having secured his seat at the first time of asking, and Mr. Pilkington Sargeant on having at last reached one of the goals of his ambition.

The Secretarship

of the Society was a good deal to the front during the contest, but I question if it influenced one vote. Fortunately, as was pointed out, there is no vacancy, and I am glad to believe no prospect of a vacancy. No one desires to lose Mr. Bremeridge's valuable services before he himself wishes to retire, and I trust that that day is still far distant. What did influence the election was the feeling that Manchester had been submitted by the late Council to a perfectly undeserved humiliation, and the electors were determined to punish some one for it. It is extraordinary that, in spite of the request of the Manchester Committee to concentrate on four men, no one seems to have "plumped" to that extent. On the average, every elector voted for 6.3 men, and, assuming

that those who supported the official list voted for all seven, it follows that the minority voted for just about 5 $\frac{1}{2}$ each. Further, on the actual voting, the minority would, under a scheme of proportional representation, have been entitled to three seats instead of the two they secured.

Last Week's Evidence

before the Patent-medicines Committee was too full of interest to be fully dealt with here, but one or two points of particular importance demand a word or two. Dr. Tirard is naturally no friend to patents, yet his evidence went to show that their use is, properly speaking, no more empirical than that of new synthetic or other remedies, many of which are adopted into the Pharmacopœia. In either case the general public is the *corpus vile* on which experiments are made, and, as the case of chlorodyne proves, it does sometimes happen that patents also find their way into official practice. The declaration that "we are all at the mercy of the man behind the counter" does not seem to have been injuriously meant, though it has a double edge; and probably it is true that the publication of the composition of a patent would not increase the practice of substitution. The information given by Mr. Aitken as to the motive-power behind the Home Office with regard to patents, and the different suggestions made by doctors and others, is valuable, as are also his remarks upon the Press, but most valuable of all is the statement that

Education Rather Than Legislation

is the remedy for the mischief; indeed, this strikes me as the wisest thing yet said on the subject. Let us hope it will have due weight with the Committee. Unfortunately, it is the natural tendency of Governments to legislate instead of educating, or as the only means of doing so. The law is their only schoolmaster, and its chief instruments are the birch and the ferule; lawmakers, from Moses downwards, have usually begun their enactments with "Thou shalt not." A more direct way of teaching might be slower in operation, but it would ultimately be more successful. Not by its Poisons Schedule (valuable as that is), but by its enforcement of education upon pharmacists has the Pharmacy Act done most for the protection of the public. This has greatly lessened the evils of counter-prescribing, and the education of the public would correspondingly lessen those of self-drugging. Prohibitive legislation, even when most practicable, is a clumsy remedy; the teaching of a little health-science in schools and by all possible means would be far more effectual.

Pythagoras

forbade his disciples to eat beans, and both before and since his day the notion that meat and morals are more or less related has been widely held. A poet not long dead sings—

Creatures of fierce or gentle kind
Can be but what they eat,

an idea that not only lies at the root of many religious observances but has influenced to a considerable extent both popular and scientific dietetics. But Dr. Robert Hutchinson tells us that this is all moonshine; there is no relation, he says, between national food and national character. To prove that meat does not make the man, or even the animal, the case was cited of an unusually mild pet lamb that was brought up on mutton chops, and reference was made to the fact that the human cannibal is sometimes quite an amiable character. Other venerable superstitions with regard to food were treated with scant respect at the School Diet Conference at the Guildhall to which I am referring. The existence of special "brain foods" was denied outright, and the idea that malnutrition is a cause of bad teeth was loudly questioned if not absolutely denied. The only old-world theories with regard to the feeding of children that seem to have survived discussion without loss of credit are that although growing boys and girls may have too much food, they cannot have more than enough, and that it does not matter much what they eat so long as they get plenty of oxygen.

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Editorial Articles.

Secret-medicine Inquiry.

IX.

THE British Pharmacopoeia has now been included in the ambit of the inquiry which is being conducted by the Select Committee on Patent Medicines. As an insight into the method of preparing the national medicine-book, nothing quite so piquant has been available hitherto as the evidence of Dr. Nestor Tirard, which was reported in our issue of last week. It was the late Dr. John Attfield who expounded at Plymouth some years ago the scrap-book method which was adopted in compiling the British Pharmacopoeia, and now Dr. Tirard, medical editor of the forthcoming volume, gives an insight into present-day methods, which appear to be not less crude than those formerly employed—a conclusion which is scarcely justified in view of common knowledge regarding the work of the Committee of Reference in Pharmacy. The Select Committee are not really concerned with the arrangements for bringing out the Pharmacopoeia, but as laymen they were mildly astonished when told that the book is fourteen years old. Antiquated but authoritative, as the medical editor described it, did not convey to the Select Committee the impression of a profession zealous in taking advantage of recent discoveries in remedial agents. Dr. Tirard answered this by a statement that new remedies do not become really popular until their strength has been standardised by the Pharmacopoeia. The practice of the B.P. Committee is apparently to find out what proprietary medicines are in demand, and then to set about devising imitations for inclusion in the B.P. The reasons given for doing this are to provide a standard and to safeguard the public against changes of strength. It is only those containing poison that are imitated in this manner, and Dr. Tirard accounted for the fact that liquor carbonis detergens, a non-poisonous proprietary, is imitated in the Pharmacopoeia by reason of a demand which, he thought, was made by the Pharmaceutical Society. Dr. Tirard expressed the opinion that proprietary medicines of value have originated from doctors' prescriptions, which seems an argument in favour of these remedies, although we do not think this was intended. There seems to be a little misunderstanding between what Dr. Tirard calls patent medicines and what is in the minds of the members of the Select Committee. Dr. Tirard includes new synthetic remedies in the same category with chlorodyne and the like, while the Committee did not seem to realise that there are proprietary rights in veronal and urotropin. The medical view of the best way of regulating the sale of proprietary medicines was stated to be that the proportion of scheduled poison should be stated on the label, although Dr. Tirard said this would not convey any meaning to a man who had had no medical education. Perhaps nothing shows more graphically the futility of the suggestion frequently put forward to place on the label the formula of a proprietary preparation. It is generally stated to be for the protection

of the public, and it therefore astonished some of the hearers to find that the statement of the amount of poison in a proprietary is for the protection of the manufacturer, as it safeguards his preparation from being altered subsequently. Looking back at the evidence of the medical editor of the Pharmacopœia, it would appear that the suppression of patent medicines would be "killing the goose that lays the golden eggs" so far as new ideas for the Pharmacopœia are concerned; but, we daresay, Dr. Tirard will in the calm of his library feel that his evidence in these respects and others would be the better of a little pruning. The other witness examined last week, an official from the Home Office, cannot be said to have added much to the information desired, except that he confirmed the impression in the mind of the Committee that the chief duty of Government Departments is to "move on" inquiries which might disturb the tranquility of the various offices. The magnitude of the interests involved increases. In the first week the civil administration of the country, the Medicine-stamp Acts, and the Pharmacy Act were discredited, and now the Pharmacopœia and the method of its preparation form an ingredient of the "melt" in the pot. So far there have been lacking practical suggestions for dealing with the question of exaggerated curative claims made on behalf of proprietary medicines, which we take to be the real object of the inquiry. The Committee are determined to get into touch with that and to discover, if possible, what Government Department is responsible for the wholesale neglect of public interests which appears to prevail in Whitehall.

A correspondent of "The Spectator," in discussing the inquiry, writes at considerable length on the subject, and says :

Some definition of terms is needed at the outset to make the position clear. The public mind is apt to confuse the two things, "a patent medicine" and a "proprietary medicine." The "Halo pills"—warranted by the advertisements to cure everything from corns to consumption—are sometimes classed as "patent medicines." That they are not. A "patent medicine" is made from a known formula, and is often prescribed by a physician. A "proprietary medicine" is registered under a particular title; its formula is secret, and no chance, except that of practical trial, is given to test the claims it makes. Most of the "patent medicines" are of real value, though of late there has been some abuse of the custom of self-medication through the indiscriminate sale of various patent preparations. As to "proprietary medicines," there are some which are honest enough as remedies for the modest range of ills they profess to cure. It is the fraudulent secret preparation, making astonishing claims to cure incurable or desperate ills, that is the evil to be grappled with.

Although all this sounds confused, strictly speaking the statement is correct, as the High Court of Justice decided in the action "Pharmaceutical Society v. Piper" in 1893 that the exemption given in Section 16 of the Pharmacy Act, 1868, to "the making or dealing in patent medicaments," refers solely to medicines which are the subject of letters patent, and it was subsequently held that the exemption is only to those medicines of which the patents are actually in force ("Pharmaceutical Society v. Fox"). Where "The Spectator" correspondent errs is in supposing that the patent medicines known to the public are patented medicines. There are very few, if any, of these on the market at the present time, and the term "patent medicine" has in the public mind become synonymous with stamped medicines of any kind. "The Spectator" correspondent writes fully on the subject generally, and criticises severely medicines and medical systems of a fraudulent nature, and says :

"If the law treated any provable false representation in a medical advertisement as evidence of an attempt to obtain

money by false pretences, such cruel frauds as those which profess to cure consumption with an opium mixture and locomotor ataxia with a cheap pill would soon be destroyed. That is the chief reform needed, and all the reform that is practicable now."

To this our contemporary adds that the suggestions are practical and useful; also it entertains the opinion that "all remedies, whether patent or proprietary, should have printed on the bottle or box, as in most Continental countries, a full statement of the drugs they contain. The public ought to know what it is swallowing." But the public do not want to know the composition. When Smith's pills do them the good they want, they care not a brass farthing what they are made of.

The White-lead Syndicate.

The ruling conditions in the white-lead market are a matter of concern to many of our subscribers in the "heavy" trade, who have, no doubt, watched recent events with anxiety. Those who follow the market are aware that the price has advanced considerably for several months past, this, of course, being partly due to the formation of the International White-lead Combination, the principal features of which were dealt with in our issue of August 26 (index folio 360) at the time of its formation. The half-penny Press has lately been investigating the operations of the combination, and as is natural when such writers turn to trade matters, some misleading and exaggerated statements are circulated, with the usual scare-heads : "Corner in White Lead," "A Gigantic Trust Raising Prices," and so on. These statements emanate from people who have but a poor knowledge of the facts having regard to the working arrangements of the combination, whose formation was intended to protect an industry which has been hampered a good deal of late years by Government restrictions. As we stated in August last, the combination includes, besides English, practically all the foreign manufacturers of dry white-lead exporting to Great Britain; and its chief object is to regulate market conditions. Last August the price of dry white-lead was on the basis of 19*l.* to 19*l.* 5*s.* per ton, less 5 per cent., in the home trade, and that of ground white-lead on the basis of 21*l.* 15*s.* to 22*l.* 5*s.* to dealers, according to quantity. Thanks to the existence of the combination a more satisfactory and reasonable margin of profit has been assured to both manufacturers and grinders or distributors; but, as will be seen from the table below, the advance in the price of both dry white-lead and ground white-lead had been largely in sympathy with the rise in the cost of raw material—pig lead :

	Pig lead	Dry white-lead	Ground white-lead
	per ton	per ton	per ton
	£ s. d.	£ s. d.	£ s. d.
Aug. 15, 1911 ...	14 0 0	19 0 to 19 5	21 15 to 22 5
Sept. 11 ...	14 10 0	19 0 , 19 5	22 5 , 22 15
Sept. 20 ...	15 0 0	20 0 , 20 5	23 5 , 23 15
Oct. 26 ...	15 10 0	20 10 , 21 0	24 0 , 24 10
Nov. 10 ...	15 15 0	21 0 , 21 10	24 10 , 25 0
Jan. 1, 1912 ...	15 12 6	21 0 , 21 10	26 0 , 26 10
Mar. 8 ...	15 17 6	21 10 , 22 0	26 10 , 27 10
May 2 ...	16 10 0	22 0 , 22 10	27 0 , 28 0

While the price of pig lead has since May 15 advanced by 2*l.* 10*s.*, the advance in dry white-lead amounts to about 3*l.* per ton, to 22*l.* 5*s.*, this increasing the working margin to manufacturers, or the combination by about 10*s.* per ton, or less than 2*½* per cent. As regards ground white-lead, allowance has to be made for the fact that the price of 26*l.* to 26*l.* 10*s.*, as fixed on January 1, includes the cost of 5-cwt. casks (previously charged extra), this being equivalent to about 25*s.* per ton. The advance in the price

of ground white-lead is not actually 5*l.* 10*s.* as shown above, but only 4*l.* 5*s.*, which shows that, after deducting the increased cost of pig lead, the margin to grinders or distributors has been increased by 35*s.* per ton. This adjustment is considered justified by the fact that the margin was formerly notoriously inadequate, considering that the cost of linseed oil has risen abnormally of late years. Allowance has also to be made for the higher cost of labour, fuel, and transport. The annual consumption of white-lead in Great Britain may be placed at roughly 50,000 tons, or about one-half the quantity mentioned in the exaggerated reports which have been circulated. These reports have undoubtedly scared consumers, judging from the much more active demand which has sprung up for ground white-lead.

Applied Chemistry.

II.

In the previous article under this title (*C. & D.*, March 9, index folio 360) we outlined the remarkable evolution of "A Dictionary of Applied Chemistry," showing how the several dictionaries which preceded it kept pace with the progress of chemical science from the eighteenth century until now. In these developments the most notable chemists of the day have been concerned, and in the second edition of the Dictionary, which he first edited fully twenty years ago, Sir Edward Thorpe has the assistance of a new race of chemists, who unite intimacy with present-day knowledge and methods and respect for what this Dictionary has brought down from the eighteenth century.

We are now able to consider two of the five volumes which are to form the new edition. The first, a generous octavo of 758 pages bound in blue buckram, commences with "Aal" and finishes with "Chestnut Extract"; while the second comprises 786 pages, beginning with "Chian Turpentine" and finishing with "Goudang Wax." In the first edition of three volumes, Vols. I. and II. extended to 1430 pages, and went as far in the chemical alphabet as "Nux Vomica." The contrast indicates how greatly applied chemistry has grown in twenty years. New methods in the practice of chemistry may not predominate, but they certainly have a valued place along with the old, and, so far as this Dictionary is concerned, they mean new matter. Wherever Sir Edward Thorpe has been fortunate to get new men to deal with the subjects, we find on critical comparison of the articles, generous regard for the old, obvious endeavour to present all that is new as pithily as possible, and bold re-writing of a whole subject now and then. The very first name which appears in the list of contributors, Dr. E. F. Armstrong, with the subjects appended and the occupation of the author, illustrates the present-day trend of British industries and the practicality of our chemical science. Dr. Armstrong is the son of a distinguished chemist, who has preached the need of system in the teaching of science. Dr. Armstrong emerged from his collegiate days an authority on enzymes, and now we find him engaged with Messrs. Huntley & Palmer, the biscuit-makers. Of his three articles in the first volume we have read the one on Bread, comparing it with the original article in "Ure" and the one in the first edition. It alone justifies our remark in regard to reverence for the old, and thoroughness in expression of the new. Further down the list is the name of Dr. Julius Lewkowitsch, against whose name are many oils and fats. The articles are exceedingly pithy—*e.g.*, the Chaulmoogra Oil Group is done in twenty-two

lines, but the author succeeds in embodying in the paragraph the more important results obtained in the Wellcome Chemical Research Laboratory. "Anæsthetics," an article of two-and-a-half pages, is from the pen of Dr. Henry Robinson, the son of a well-known pharmacist, and he makes it an interesting chapter of physiological chemistry.

In the second volume the first article which we read was that on Chlorine. Professor Lunge wrote the article on this subject in the first edition of the Dictionary, and Mr. Arthur Carey, of the United Alkali Co., Ltd., has revised it. When Lunge wrote alkali technologists were centring their hopes on magnesium-oxychloride processes for obtaining chlorine; these have failed, and are now dealt with in a paragraph, while electrolytic methods receive very full treatment. Mr. Carey's monograph embodies the more important data, illustrations, and tables of the last edition, and has about it finishing touches which justify the attachment of his initials to it. In the same part of the alphabet we find a new article on Cotton by Dr. Ernest Goulding, a pharmacist on the Imperial Institute staff. It deals with the kinds of cotton, treating very generally the chemistry of the fibre, and although the article is a distinct advance on the previous one, we venture to suggest that the importance of cotton as the raw product of our largest industry will in a future edition require almost as much space as chlorine. We find that the pharmaceutical articles in the Dictionary are mainly word for word reprints of what were printed twenty years ago. They are disappointing, unequal, and in some cases misleading, because they do not embody present-day knowledge. An accidental circumstance demonstrates this admirably. the old article on Gentian is followed by a new one on Gentian Root from a different pen! Among the monographs in the second volume which can only be mentioned by name are Fuel, by Dr. W. A. Bone; Disinfectants, by Dr. S. Rideal; Ginger, by Mr. C. H. Cribb; Crops, by Dr. A. D. Hall; Fermentation, by Dr. A. Harden; Glue, by Dr. H. Ingle; Formaldehyde, by Dr. R. Lessing; Flashlights, by Mr. G. S. Newth; Esterification, by Dr. J. J. Sudborough; and Creatine, with allied subjects, by Dr. Martha A. Whitley. Hundreds of new subjects are treated, and monographs are expanded, hence the greatly increased size of the Dictionary; yet careful condensation is notable on almost every page. From the editorial point of view the last-mentioned characteristic is particularly attractive, because wherever abbreviation is evident, close by one finds the introduction of new data and facts, the expansion of a table which gives new factors, and other evidence that the editor has with him in the work the experience and suggestions of many experts in the subjects, so that the Dictionary maintains its traditions, is a positive help to chemists of the present day, and is worth the money—45*s.* net each volume. It is published by Messrs. Longmans, Green & Co.

EDINBURGH being the pharmaceutical venue of 1912, it is interesting to record that a visitor's sole reason for boarding one of the tram-cars was that it proclaimed the words "Best and goes furthest."

DRUGS AND COWS.—In some German towns a caution is given as to the sale of cows' milk after the animal has had administered to it certain medicines—arsenite, tartar emetic, opium, eserine, and other alkaloids being mentioned. The subject has been examined anew by Dr. H. B. Koldevijn, and he reports that only lithium, quinine, and urotropin can pass into the milk of cows. He obtained negative results with mercurials, antimonials, bismuth, zinc, morphine, and aspirin. In similar experiments with goats, lead and fluoresceine gave positive results, while cysteine, phenolphthalein, and alcohol were not to be traced.

Copaiba.

AN important addition to our knowledge of copaiba is contributed by Denssen and Eger to the "Chemiker Zeitung" (1912, 60, 561). By acting on β -caryophyllene with nitrogen tetroxide (NO_2), a crystalline nitro-derivative of caryophyllene, $\text{C}_{12}\text{H}_{18}\text{N}_3\text{O}_6$, melting at 159.5° - 160° , is obtained. This compound is very useful for the detection and estimation of β -caryophyllene in essential oils. The following oils were examined by the authors: (1) Caryophyllene from clove oil, (2) Para copaiba oil, (3) Maracaibo copaiba oil, and (4) mixtures of Para copaiba oil with gurjun oil and African copaiba oil. Three grams of the oil is dissolved in 25 c.c. of absolute ether and treated with the nitrogen oxide. As soon as the separated nitro-compound begins to agglomerate at the bottom of the vessel, the reaction is stopped, and the precipitate filtered off, washed with ether, dried on a porous tile, and weighed. The direction in which this reaction may eventually be of considerable value is shown by the following figures, giving the amount of crystalline nitro-compound obtained:

Oil	Nitro-compound obtained per cent.
1. Caryophyllene (from stem oil) ...	50-52
2. " (" bud oil) ...	50
3. Para copaiba oil (rotation -11.75°) ...	9.5-10
4. " (" -14.5°) ...	15
5. " (" -10.25°) ...	15
6. " (" -19.40°) ...	15-16
7. Maracaibo copaiba oil (rotation -3.9°) ...	5-6
8. " (" -10.20°) ...	3
9. Maturin copaiba oil (rotation -10.30°) ...	8-9
10. No. 6. with 10% gurjun at ...	13.3-14.3
11. " 20% "	11.7-12.7
12. " 30% "	10.7-11.7
13. " 50% "	7.7-8.3

In the case of African copaiba used as an adulterant, the authors separate the oil into four fractions boiling at the temperatures given below, at a pressure of about 9 mm., and the third and fourth fractions are dissolved in absolute ether and treated with hydrochloric-acid gas; the amount of dihydrochloride which separates is weighed, and its melting-point, in its crude condition, taken. As cadinene, the sesquiterpene occurring to a considerable extent in African copaiba has a boiling-point about 10° higher than that of caryophyllene; it accumulates in fractions 3 and 4. With pure Para copaiba oil, the dihydrochloride obtained consists principally of β -caryophyllene dihydrochloride (m.p. 69° - 70°), while if African copaiba be present a greater amount of cadinene dihydrochloride is present (m.p. 117° - 118°). The figures given below show the effect of this adulterant:

	Fractions at 9 mm.			
	1. $114-117^\circ$	2. $117-122^\circ$	3. $122-129^\circ$	4. $129-132^\circ$
A. Pure oil (-9.7°):				
Optical rotation	-8.80	-11.37°	-12.65°	—
% dihydrochloride	—	—	23%	15%
M.p. of ..	—	—	75°	76°
B. With 5% African oil (-8.7°):				
Optical rotation	-8.85°	-10.25°	-11.33°	—
% dihydrochloride	—	—	25% } very small	}
M.p. of ..	—	—	85° } amount	}
C. With 10% (-6.3°):				
Optical rotation	-6.70°	-7.85°	-7.25°	-4°
% dihydrochloride	—	—	-18.5%	10%
M.p. of ..	—	—	110-112°	115°
D. With 20% (3.30°):				
Optical rotation	-6.2°	-6.45°	-1.94°	$+3.66^\circ$
% dihydrochloride	—	—	29%	19%
M.p. of ..	—	—	114-115°	116-117°

It will be seen that this method gives a very reliable means of determining if African copaiba be present or not.

The authors recommend Turner's reaction for the detection of gurjun balsam in copaiba. This consists in dissolving 3 drops of the sample in 3 c.c. of acetic acid with 2 drops of a freshly prepared 10-per-cent. solution of sodium nitrite, then pouring the liquid on to a layer of concentrated sulphuric acid. Within half an hour a deep violet colour develops in the acetic-acid solution if gurjun balsam be present.

A further reaction consists in oxidising the oil in acetone solution, with potassium permanganate, when gurjun ketone is formed, which easily yields a semicarbazone, $\text{C}_{16}\text{H}_{27}\text{N}_3\text{O}$, melting at 234° . To apply this test 170 grams is fractionated at 10-12 mm., and the first three fractions of about 25 per cent. each are separately tested. The oil is dissolved in 300 grams of acetone and 160 grams of potassium permanganate added, with shaking, in portions of 3 grams at a time during four hours. After the reaction is over, the clear liquid is poured off and the manganese residue washed with more acetone, and the solvent evaporated. The residual oil is distilled, and the fractions (at 10 mm.) between 130° and 165° are shaken with an aqueous solution of semicarbazide hydrochloride (1.1 gram in enough water to dissolve it), and 1 gram of potassium acetate in 3 c.c. of alcohol. In two days the semicarbazone separates completely, and is washed with water and dried on a porous tile. It melts in the crude condition at 215° - 228° , or when once recrystallised from boiling alcohol at 234° . The semicarbazone has a specific rotation of $+317^\circ$.

Toxicity of Methyl Alcohol.

By Thomas Tyrer, F.I.C., F.C.S.

IN a recent issue of THE CHEMIST AND DRUGGIST reference was made to preparations made with methyl alcohol in Germany. It should be clearly understood that such preparations, toilet or otherwise, pay duty as alcohol (ethyl) on entry here. One has wondered why methyl alcohol was freer in Germany than here. On the purer qualities of high strength duty is imposed here, and methyl alcohol for research purposes (scarcely any other existing here) is more expensive than ethyl alcohol of equal strength and purity, and subject to the same restrictions as to duty and use. Opinions differ as to the toxicity of methyl alcohol, and in the United States, Columbia spirit (as methyl alcohol of all grades is called) opinions are different in various localities. In Protectionist States its toxicity is regarded with complaisance. Generally, however, now that ethyl alcohol is under practically similar conditions to those existing in Great Britain, methyl alcohol is regarded with increasing disfavour. In official quarters its toxicity was doubted until comparatively recently, but it is said that the late chief of the Government laboratory has now definitely stated that methyl alcohol is toxic. If so, and there is considerable evidence to support that view, the ordinary methylated spirit has a protection in this respect other than ascribed to the presence of the bodies which constitute its suitability as a denaturant of alcohol for industrial use under official sanction. "The Oil and Colour Trades Journal," in its issue of July 8, 1911, in an excerpt from a letter from M. Barbet, probably the highest living authority on fractional distillation (industrially), to Mr. J. G. McIntosh (a voluminous writer on alcohol), unhesitatingly declares methyl alcohol to be toxic. Barbet cites the catastrophe in a German locality, and observes that the introduction of methyl into liqueurs, etc., is a fraud from every point of view, as it is not a fermentation product. Mr. McIntosh observes, in concluding Barbet's excerpt, that on the basis of toxicity there is no excuse for the present excise duty on methyl alcohol. It is within my knowledge and experience that the authorities will not permit even now the sufficient purification of wood naphthas for the production of formaldehyde at a reasonable cost, unless under the strictest supervision. I have seen the only works in Great Britain producing formaldehyde, and have examined the conditions which seriously handicap progress, not to say expansion. Surely, if methyl alcohol is toxic, the restrictions and control can, and ought to be, less exacting. But so long as the department regards methyl alcohol from the "dutiable" point of view, progress is stayed. Of course, complete freedom, with instances of use immorally in existence, cannot be expected, but liberal concessions are absolutely needful for industrial development. A friend of mine has made the bold experiment of taking up to nearly 20 c.c. of methyl alcohol, with resulting sensations that severely warned him to stop. Friends on

the Continent have stated that workmen who have been under the impression that the alcohol they were using was simply another type of potable alcohol have fallen helpless on the floor and become delirious in a short time on doses about equal to 25 c.c. They have no doubt that if the doses had been 100 c.c. paralysis and death would ultimately have ensued. Whenever cases of this kind arose, the stomach pump was immediately employed to minimise the effects of quantity taken. In the United States Dispensatory of 1907, p. 1569, under "Methyl alcohol" is a most interesting article comparing it with ethyl alcohol therapeutically, which writes emphatically on methyl alcohol in any form the word "Dangerous." It is remarked: "It has very properly fallen into complete desuetude in medicine, and under no circumstances should it be used by pharmacists as a menstruum." Much more could be adduced against the use of methyl alcohol in any form for internal use—or, for that matter, personal external use either; but enough—methyl alcohol is a "poison." Technical, excise, and fiscal questions may stand over for another communication.

[The scores of deaths recently in Berlin and Japan from methyl alcohol liquors is surely evidence enough that it is a poison, and in a different class from ethyl alcohol. As to the importation of methyl alcohol preparations into this country, we quote from our issue of September 1, 1906, p. 367:

"Certain medicinal and toilet articles are now being imported from and largely sold in this country which are free from ethyl alcohol, but are made with methyl alcohol. They pay no spirit duty, because the ingredients dissolved in the methyl alcohol are considered by the Customs authorities to make the alcohol impotable. This appears to be a rational interpretation of Section 133 of the Spirits Act, 1880, and powers to deal with purified methyl alcohol obtained since."

Mr. Tyre now says that duty is charged on these; if so, the Revenue authorities are putting a different interpretation upon the law, and it would be interesting to know why.—
EDITOR, C. & D.]

Festivities.

Southampton Pharmacists' Association.—The President (Mr. Bates) gave an "At Home" at Courman's Restaurant, High Street, on May 15, when an enjoyable and harmonious evening was spent. The musical programme was contributed by the Misses Benest, and Messrs. Atkinson, Birch, Ferryman, Dodridge, O'Doneghue, Oram, and Wride, while Mr. Vincent accompanied.

Tunbridge Wells Chemists' Assistants held a reunion at the Bridge Hotel on May 16, the function, which was until a few years ago held annually, taking the form of a dinner, followed by a smoking-concert. The chair was taken by Mr. C. Burton, and about thirty guests were present. During the evening the Chairman said it was hoped to reorganise the Assistants' Association, and in the course of time to arrange cycle rides, swimming, tennis, excursions, and other summer attractions, while in the winter discussions, lectures, and papers on educational subjects would be given. There was an excellent programme of music at the concert.

The German Male Choirs of London gave a concert in the Guildhall, E.C., on Friday evening, May 17, before a large audience, in aid of the *Titanic* Mansion House Fund. A prologue in German, specially written by Mr. L. Holthusen, was dramatically recited by Mrs. Alix Grein, and at the close Mr. Holthusen delivered an epilogue in English, both of which were enthusiastically received. The choir, conducted by Professor Max Laistner and Herr Julius Schroeder, gave several spirited choruses, which were much appreciated. Madame Sobrino charmed the audience with her songs, and other items were Chopin's Funeral March on the piano by Professor Max Laistner, and exquisitely rendered harp and violin solos by Herr A. Kastner and Herr Hans Wessely. The Lord Mayor and representatives of the German Embassy were present, the former in a very tactful speech thanking the artists for their help and sympathy. The National Anthem was then sung, and Mr. Holthusen called for three cheers for the Lord Mayor, which were heartily given, followed by the singing of "For he's a jolly good fellow." Thanks mainly to the indefatigable efforts of Mr. Hugo Lorenz and the Committee, the affair was highly successful, musically, socially, and financially.

Royal Institution.

THE Friday evening discourse on May 17 was by Mr. W. Duddell on "High-frequency Currents." Sir William Crookes was in the chair. Mr. Duddell began by referring to the beautiful and mysterious effects obtained with high-frequency currents which appear at first sight to disobey the ordinary laws of electricity, but upon closer examination are found to follow them closely. He then gave a rapid survey of elementary electricity, leading up to an explanation of the differences between continuous and alternating currents. "Frequency" was explained, and the fact stated that currents are obtainable at a frequency of from 10,000 to 1,000,000 of great practical utility in wireless telegraphy and in surgical and medical practice. The methods of generating alternating currents were then dealt with, one of the simplest being the movement of a wire across the poles of a magnet. In this connection attention was drawn to a large magnet belonging to the Institution, which was purchased on the suggestion of Faraday at the 1851 Exhibition. It is difficult for one person to remove the keeper from this magnet. The old "Alliance" machine first used in lighthouses in 1863 and still in limited use is on this simple principle. It runs at 400 revolutions a minute. The lecturer has recently constructed one of these machines which has a frequency of 8,000 revolutions per minute, and this instrument, which was in the instrument-room below, was connected with the lecture-theatre by telephone. When the machine was set going the telephone gave out a singing noise, but as the frequency rose the sound became unpleasant and then died away, the human ear being unable to appreciate the vibrations involved. The lecturer considers that there are great probabilities in high-frequency machines on this principle, but there are difficulties in running still to be overcome. Another principle adopted in generating alternating currents is an induction method, a wire being wound round a magnet and the magnetic circuit closed. Slides were then projected on the screen of the Alexanderson high-frequency alternators, which are being made in the United States. The rotating disc in this machine is of a special shape to prevent bursting when run at a high speed and with 300 slots round the edge of the disc filled with brass plugs. The disc has a flexible shaft with auxiliary bearings for critical speeds. A frequency of 100,000 is obtained, but the inventor has since, by using a new form of zigzag winding, constructed a machine with 800 slots in the disc and capable of giving a frequency of 200,000, the limit at the moment. As an interesting exhibit a machine with zigzag winding was shown belonging to Sir David Salamon, which was constructed in this country some years ago, and gives 8,700 revolutions a minute. Dr. Gelschmidt, in Germany, is also working out a transfer method of four-fold magnification of the frequency, and, although there are many practical difficulties, a machine has been produced with a frequency of 30,000. There is, the lecturer said, a great future for these high-frequency alternators. The Leyden-jar method was next dealt with. This consists of charging a Leyden jar to a high voltage and allowing it to discharge through a spark-gap. Some pretty experiments with high-frequency currents shown by Tesla in that room twenty years ago were repeated in connection with a method of keeping the spark-gap cool by means of a revolving disc. The limitations of the spark-gap have led to methods of coupling up and synchronism, and in this way at Lyons a frequency of 10,000 has been obtained. Arc methods of generating high-frequency currents depending upon the instability of the arc were then considered. The methods are by violently cooling the arc with a stream of cold water, or with cold copper, and by embedding the arc in coal-gas. Poulsen has with the last method succeeded in sending 100 words a minute over 1,000 miles. S. G. Brown's method with a Leyden jar, which gives only a limited amount of current, was also mentioned. The rest of the lecture was taken up by a series of pretty experiments with Tesla effects.

CHEMICAL SOCIETY.

SIX communications were read at the meeting held at Burlington House, Piccadilly, London, W., on May 16. Dr. M. O. Forster, F.R.S. (Vice-President), who occupied the chair, announced that Sir W. A. Tilden would deliver the Cannizzaro memorial lecture on June 27 at 8.30 p.m. The first two papers, by Professor A. G. Green and Mr. R. E. Woodhead, and Professor Green and Mr. R. N. Sen, dealt with dyestuffs, these being respectively a further stage in the aniline-black controversy and an inquiry into the effect of two chromophores in one dye. In the latter it was found that in an azo dye containing the triphenylmethane group the effect of the yellow and violet chromophores is to produce a dye with a red shade, the colours being apparently additive. The next paper, by Dr. R. H. Pickard and Mr. J. Kenyon, arose out of this year's presidential address on stereoisomerism. The authors have investigated the rotatory powers of ac-tetrahydro-2-naphthol and some of its esters, and this series, together with those previously studied, appear to indicate that the progression of the molecular rotation at the boiling-point changes when the number of carbon atoms in the side-chain is equal to those in the nucleus. This differs from the spiral-chain hypothesis of the President.

The next paper was a communication from the Wellcome Chemical Research Laboratory in regard to the chemical examination by Mr. Harold Rogerson of the

ROOT-BARK OF EUONYMUS ATROPURPUREUS.

The author having referred to the botanical origin of the drug, and to "euonymin," recalled the fact that Wenzell in 1862 stated that the bark contained an amorphous, neutral, bitter principle, termed "euonymin," several resins, organic acids (including the so-called "enonic acid"), a substance resembling asparagine, sugar, etc. Prescott (1878) referred to Wenzell's euonymin as a glucoside, and stated that it was obtained by Miller as a white, intensely bitter, uncristallisable solid. Schmiedeberg stated in 1883 that euonymin had been prepared by Hans Meyer, Dorpat, and added that it is a glucoside sparingly soluble in water (but readily in alcohol), which in amounts of $\frac{1}{15}$ to $\frac{1}{10}$ of a milligram arrests the action of a frog's heart in systole. It was also said to crystallise in colourless, cauliflower-like masses, which consist of radiating groups of needles; but no melting-point or analysis was given in support of these statements. Naylor and Chaplin (1889) obtained a substance (melting at about 182°) which was afterwards found to be dulcitol. This observation was confirmed by Hoehnel (1900). The results of the new research on the root-bark of *Euonymus atropurpureus* are summarised below :

The alcoholic extract yielded on steam distillation a pale-yellow essential oil (equivalent to 0.01 per cent.), which deposited a substance at first thought to be benzoic acid.

The water-soluble portion of this extract contained a relatively large amount of dulcitol (2.09 per cent. of the drug), which was confirmed by preparing the hexa-acetyl and hexa-benzoyl derivatives. A new acid ($C_6H_6O_5$, m.p. 121°-122°) was also found. This substance, also found in the essential oil, behaves similarly to benzoic acid, except in not giving any coloration with ferric-chloride solution. There is little doubt that the new acid is *furan-β-carboxylic acid*, which has not been prepared previously. A new crystalline alcohol ($C_6H_6O_3$, m.p. 248°-250°), possessing a bitter taste, was also isolated and designated euonymol. It gives with acetic anhydride and sulphuric acid a pink coloration, the solution having also a green fluorescence. With concentrated sulphuric acid a yellow solution with a green-yellow fluorescence is yielded. There was also obtained a sugar yielding d-phenyl-glucosazone, and small amounts of tannin and colouring-matter.

The portion of the alcoholic extract insoluble in water consisted of a dark brown resin (3.2 per cent. of the drug). From this petroleum extracted a new series of oxygenated phytosterols—viz., *euonymsterol* ($C_{28}H_{48}O_2OH$, m.p. 137°-138°) and *homoruonyesterol* ($C_{28}H_{48}O_3OH$, m.p. 133°-134°) giving monoacetyl derivatives, and *atropurrol* ($C_{28}H_{48}(OH)_2$, m.p. 283°-285°) giving a diacetyl derivative, as well as *citrullol*, previously isolated from colocynth. A mixture of fatty

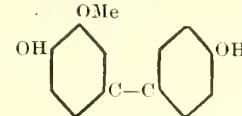
acids, consisting of palmitic, ericotie, oleic, and linolic acids, was also separated, but the ethereal, ethyl acetate, and chloroformic extracts of the resin yielded only *amorphous products* with a bitter taste. No product was obtained corresponding to "euonymin," nor was there any evidence of any glucosidic substance being present in the bark.

The Chairman, in opening the discussion, said that the research bore the hall-mark of Snow Hill. He asked how the shrub got the name "burning bush." Dr. F. B. Power replied that this was derived from the bright red colour of the fruit. Mr. H. Finnemore asked if euonymol had been tested physiologically. It gave the same colour-reaction as apocynin from Indian hemp. Dr. Harden was concerned as to whether euonymus-bark would form a cheap source of supply of dulcitol, as this substance is periodically unobtainable. However, no one present could supply the comparative prices of the drug and the sugar. [Euonymus-bark in wholesale quantities costs about 1s. 6d. per lb., and dulcitol is quoted at the rate of 65s. per oz. It would undoubtedly pay to extract the diluent dulcitol from commercial "euonymin," which could be used as a stronger euonymus-extract. A few pounds of dulcitol would, however, flood the market.—ED.] Mr. Rogerson, in replying, said that euonymol had not been tested physiologically.

The next paper, by Messrs. G. F. Cooper and W. H. Nuttall, was read by the latter, and dealt with the preparation of furane-2:5-dialdehyde, which is easily obtained by the modified oxidation of chlor-methyl furfuraldehyde. It offers possibilities of new derivatives, and is of interest in connection with the cellulose molecule. The last communication, by Dr. J. C. Cain and Professor J. L. Simonsen, constituted Part I. of researches on santalin. Professor Simonsen, who had come over from India, read the paper, which was entitled

SANTALIN AND ITS DERIVATIVES.

This was concerned with the various formulæ proposed for santalin contained in the wood of *Pterocarpus santalinus*—viz. (1) $C_{16}H_{16}O_5$ (Pelletier), (2) $C_{22}H_{26}O_9$ (Bolley), (3) $C_{15}H_{14}O_5$ (Weyermann and Häffely), (4) $C_{17}H_{16}O_6$ (Franchimont and Sicherer). The authors separated santalin ($C_{15}H_{14}O_5$, melting at 226°) from red sandal-woods from three different sources. The lower melting products of other investigators was apparently impure, as slight trace of impurity lowers the melting-point to 124°. Santalin contains one methoxy and two hydroxyl groups, and on oxidation yields a mixture of veratric and anisic acids. The formula tentatively put forward is :



Santalin is apparently present in the plant as a glucoside, the sap of red sanders-wood being colourless. This is being investigated.

INDIA AND THE EAST.

(From the "C. & D." Correspondents.)

PHOSPHORUS MATCHES.—A Bill on the lines of the White Phosphorus Matches Bill in England is now being drafted in the legislative department of the Indian Government. The Bill will prohibit the manufacture and sale of such matches in India and also their importation from abroad.

A RECORD OF PROGRESS.—Messrs. B. K. Paul & Co., Bonfield's Lane, Calcutta, have issued an interesting brochure, with illustrations, giving an outline of the growth of the firm since it was established by Mr. Butto Kristo-Paul fifty-three years ago. The business had its inception in a tiny shop in the busiest part of Barabazar, when indigenous drugs and the native system of treatment held sway. Mr. Paul realised that there were great possibilities in importing European drugs and medicines, and he was one of the first to indent direct, the result being that the concern is one of the largest of its kind in India.

ASSOCIATION AFFAIRS.

Brief Records.

National Union of Assistant Pharmacists.—A branch meeting was held at the London College, Clapham Road, S.W., on Sunday afternoon, May 19, Mr. Frederick Bullen in the chair. Messrs. Bullen and Wilson were appointed delegates to the annual meeting in Birmingham on Whit Monday.

Salford Pharmacists' Association.—The annual meeting was held on May 9, Mr. Cargill (President) in the chair. Messrs. Harrop, Stout, Fletcher, Lewis, Simmons, Gardner, Thompson, Beltringer, Gill, Blore, and Davison also attended. The Treasurer presented his report, which was considered most satisfactory, and was unanimously adopted. Mr. J. W. Gill was elected President for the ensuing year on the motion of Mr. Davison, seconded by Mr. Blore. Messrs. Harrop and Davison were re-elected Treasurer and Secretary respectively.

Manchester Optical Society.—The annual meeting was held this week at the Albion Hotel, Manchester. Mr. Alf. Hershberg, the Hon. Secretary, presented his report of the work of the past session, in which he stated that the membership is now eighty-three. The report was adopted. Mr. J. C. Kidd was re-elected President, and Messrs. Geo. Bennett, R. T. Forbes, and C. W. Lloyd Vice-Presidents. The other appointments were: Treasurer, Mr. A. H. Turner; Hon. Secretary, Mr. Alf. Hershberg; Auditor, Mr. E. Moore (Haslingden); Delegates to the National Federation of Ophthalmic Opticians, Messrs. Kidd and Hershberg; Council, Messrs. T. Beardsall, W. Beardsall, J. W. Oberle, J. Hall (Walkden), C. P. Spedding, F. Isherwood, and B. Rotenberg (Bolton). The annual Conference of the National Federation of Ophthalmic Opticians is to be held in Manchester on July 10 and 11.

Llandudno and Colwyn Bay Pharmacists' Association.—A meeting was held at the British Hotel, Bangor, on May 15, the President (Mr. Hughes, Conway) presiding. The following members were present: Messrs. R. R. Jones (Amlwch), J. E. Owen, W. J. Jones, W. H. Parry, H. R. Jones (Bangor), Hughes (Bethesda), Roberts, McIntosh, Smith, Cesair (Llandudno), Rogers Jones (Llandudno Junction), Lloyd Jones (Festiniog), Parry (Llanerchymedd), and Adamson Lloyd (Hon. Secretary, Colwyn Bay). The following were elected members: Messrs. Pritchard (Ebenezer), W. P. Williams (Llanberis), Pritchard and R. Jones (Beumaris), Thomas (Llanfair P.G.), and R. H. Williams (Cemaes Bay), bringing the membership of the Association to fifty-six. The question of a representative of the Association on the National Pharmaceutical Insurance Committee (Wales) was discussed, and it was decided that the Hon. Secretary be appointed to attend the meeting at Cardiff on May 30. It was further resolved that the Vice-President (Mr. Adamson) be asked to accompany the Secretary as a second representative.

North-East Lancashire Chemists' Association.—A meeting was held at the headquarters in Richmond Terrace, Blackburn, on May 15. The President (Mr. W. H. Grimshaw) was in the chair. It was reported that the local Tradesmen's Association had petitioned the Town Council to put the new Shops Act into force as regards the half-day closing on Thursdays. It was decided that the Association should support the application for a compulsory closing order. The question was raised of the sale of diachylon, and it was decided that the members should not supply diachylon, either with or without other ingredients, unless the seller is satisfied that the substance is intended for a legitimate purpose. Copies of the resolution were sent to the Chief Constable for the borough, the coroner for the county (Mr. H. J. Robinson), and the medical officer (Dr. Alf. Greenwood). The Organisation Committee is to meet to nominate persons for various appointments required by the operation of the National Insurance Act. This committee consists of Messrs. Grimshaw, C. A. Critchley (Treasurer), J. W. Openshaw (Hon. Secretary), and J. W. Aspinall.

Leicester Chemists' Association.—The annual meeting was held at the Foresters' Institute on May 14, Mr. G. Hampton (President) in the chair. There were also present Miss Richardson and Messrs. Bockley, Burford, Clear, Clarke, Fry, Inglis, Johnson, Lewis, Martin, Ough, Stiles, Tomlin, Tranent, E. B. Ward, A. E. Young, and C. J. Avery (Hon. Secretary). Mr. Avery read the annual report, which mentioned that fourteen new members have been elected during the year, bringing the total membership up to seventy-four. The financial statement showed a balance in hand. The reports were adopted. A letter was read from Mr. Marfitt resigning the co-Secretaryship, and he was accorded a special vote of thanks for his services. Mr.

Wilby also resigned the office of Treasurer. The following officers were then elected: President, Mr. G. Hampton; Vice-President, Mr. Lewis Ough, F.C.S.; Hon. Secretary, Mr. C. J. Avery; Treasurer, Mr. F. Blockley; Committee, Messrs. Burford, Hearnshaw, Hind, Lewis, Nixon (Hinckley), Stiles (Market Harborough), E. B. Ward, and A. E. Young. It was decided that the offer of three prizes to pharmaceutical students at the technical schools be continued until revoked by the Association.

Doncaster Association of Pharmacists.—A meeting was held at the Albany Hotel on May 14, Mr. W. E. Plant in the chair. There were also present Messrs. F. Jackson (Bawtry), G. Booker, M. H. Stiles, J. P. Norwood (Wath-on-Dearne), J. Jones (Mexbro'), C. Parkin, J. C. Man, and the Hon. Secretary (Mr. Harry W. Stiles). The President referred sympathetically to the death of Mr. W. S. Fish, and the Secretary reported that the Association had been represented at the funeral. A vote of condolence with Mr. Fish's family was passed. Mr. M. H. Stiles was appointed to attend the British Pharmaceutical Conference as a delegate. The following were elected to serve upon the Organisation Committee in accordance with the Local Associations Committee's Federation Scheme: Messrs. M. H. Stiles and J. P. Norwood (Divisional Secretaries), together with Messrs. G. Booker, W. E. Plant, C. Parkin, F. Jackson, E. A. Collings, and Harry W. Stiles. The National Insurance Act was discussed, and it was resolved to support the appeal for funds from the Standing Committee on Insurance. Messrs. M. H. Stiles and J. P. Norwood reported on their visit to London during the Chemists' Exhibition week. A brief discussion of the Shops Act terminated the proceedings.

Eastbourne Pharmacists' Association.—A meeting was held at the Queen's Hotel on May 14, Mr. Forbes in the chair. Messrs. Browne, Moss, C. H. Temple, W. Price, A. Mills, G. A. Harmer, F. Temple, Procter, J. Senior, Bransom, and the Hon. Secretary (D. Marchant) were also present. The Secretary was asked to write to Mr. Parish and express the sympathy of the members in his serious illness. After correspondence in regard to the Shops Act and other business had been dealt with, Mr. G. A. Harmer gave certain information regarding the Insurance Committee, and it was resolved to send an additional subscription of 2*l*. 2*s*. to the fund. It was also decided that the Hon. Secretary send the following resolution to the Society, the Chancellor of the Exchequer, the local member of Parliament, and the Insurance Committee: "The Eastbourne Pharmacists' Association wishes to place on record its unanimous support of the resolution adopted by the English pharmacists at the meeting held at 17 Bloomsbury Square, London, W.C., on Wednesday, May 8." It was unanimously agreed that the Hon. Secretary should write to a firm and express their amazement at certain offers in a pamphlet on "A Series of Window-displays and their Products," and to express the opinion that the proprietaries bore insufficient remuneration.

Western Pharmacists' Association.—The attendance at the annual meeting held at the Restaurant Frascati, London, W., on May 22, was smaller than usual, only twenty-five members being present. Mr. W. Browne (President) occupied the chair. A unanimous resolution of congratulation was passed with Mr. C. B. Allen and Mr. E. T. Neathercoat, members of the Association, on heading the poll at the Pharmaceutical Council election. The report of the Hon. Treasurer (Mr. H. Raithby Procter) showed that the session started with a balance of 29*l*. 9*s*. 10*d*. and ended with a bank credit of 25*l*. 1*s*. 10*d*. The receipts included 40*l*. 10*s*. from subscriptions. The expenditure included 15*l*. 15*s*. for deficits on social functions, 7*l*. 7*s*. donations to Benevolent Fund, and 3*l*. 17*s*. 6*d*. on refreshments at special joint meeting. The Treasurer mentioned that the Association aimed at spending half the subscriptions received on social events, and expressed surprise and disappointment at members not taking full advantage of these functions. A sum of 5*l*. 5*s*. was donated to the Benevolent Fund. The Hon. Secretaries' report, read by Mr. R. E. Lownsborough, reviewed the work of the session. Thirty-one new members had been elected, and the membership now stood at 200, including seven honorary members. A vote of thanks was accorded to the President and the Committee. The Hon. Secretaries, who were described as the strongest the Association ever had, were also cordially thanked. The retiring members of the Committee (Messrs. Marshall, Gamble, C. T. Allen, and Lownsborough) were re-elected, as also were the auditors (Messrs. J. Smith and N. H. Schollar). Messrs. Marshall, Procter, White, Crossley-Holland, and Lownsborough were appointed delegates for the Edinburgh Conference. The President's valedictory address dealt with the session's work. A general discussion then ensued on the Shops Act.

Bradford Chemists' Association.—The seventeenth annual meeting was held on May 21 at the offices of the Bradford Chamber of Trade. The chair was occupied by the retiring President (Mr. Marmaduke Firth), and the attendance was above the average. The Secretary submitted the annual report, which stated that the total membership is sixty-four, being an increase of two on the previous year's membership. The report was adopted. The balance-sheet, showing that the credit balance had been increased during the year from 12*l.* 18*s.* 10*d.* to 15*l.* 3*s.* 6*d.*, was adopted. The election of officers resulted as follows: President, Mr. Marmaduke Firth; Vice-Presidents, Messrs. F. A. Wilcock and J. Calvert; Hon. Secretary, Mr. W. E. Metcalfe; Treasurer, Mr. J. Holmes; Members of Council, Messrs. A. S. Dean, W. J. Jolly, and W. K. Jackson. In the course of a short discussion on the *National Insurance Act* the President stated that, with Mr. R. T. Ailson, Mr. A. Hanson, and Mr. D. S. Priestley, he attended the meeting in London on May 8, and had formed the conclusion that the chemists of the country are to be taken into the confidence of the Pharmaceutical Society more in the future than they had been in the past. The question was then discussed of the proposal that the Association should fall in with the scheme of the Bradford Chamber of Trade for its conversion into a Section of the Chamber. The Council of the Association unanimously recommended that the Association should be formed into a section, and a resolution was adopted involving the change. The name of the Association in future will be the "Bradford and District Pharmacists' Association Section of the Bradford and District Chamber of Trade." In regard to the *Shops Act*, the President reported that a request for a half-day closing order had been sent in, and it was stated that there was no chance of any such orders being issued before July or August.

Cambridge and District Pharmaceutical Association.—A meeting was held at Croydon Chambers, Regent Street, on Friday, May 17, Mr. E. H. Church (President) in the chair. Alderman A. S. Campkin (Mayor of Cambridge), Alderman H. F. Cook, J.P., Messrs. Arthur Deck, A. Parson, J. Evans, S. F. Barker, E. Titterington, A. F. Course, B. S. Campkin, F. J. Missen, E. S. Peck, M.A., J. Wood, J. A. Palmer, Hill, Tuck, Atkins, Knowles, Parker, and T. J. Mallett (Hon. Secretary) were also present. The Secretary gave the result of the recent competition for juniors. The questions had been framed so as to cover the subjects of the lectures and papers which had been delivered and discussed during the session, and were as follows: (1) Outline a scheme of study for apprentices; (2) give a short account of the chemistry of photography; (3) describe the practical use of the microscope in pharmacy; (4) state the regulations for the storage and sale of poisons; (5) select and describe ten *materia medica* specimens; (6) write a short essay on distillation. Five questions had to be answered in two hours. Six candidates attended, and Mr. R. R. Bennett, B.Sc., F.I.C., examined and reported on the answers. On the envelopes containing the winning candidates' names being opened by the President, it was found that the first prize had been gained by Mr. E. Titterington (the Remington's "Pharmacy" offered by Burroughs Wellcome & Co.), the second prize (from the Association) by Mr. Laxton, and the third prize (given by Mr. E. S. Peck) by Mr. Leslie Williams. The President called upon the Mayor to present the prizes, and congratulated him on his re-election to the Pharmaceutical Council. The Mayor expressed his appreciation of the kind and sympathetic remarks and the cordial way in which the meeting had received them, and proceeded to refer in detail to the work on the Council and the present pharmaceutical situation. He then congratulated the winners and distributed the prizes. Mr. Titterington returned thanks on behalf of the Juniors. Mr. B. S. Campkin proposed a vote of thanks to Messrs. Burroughs Wellcome & Co. and to Mr. Bennett, which was seconded by Mr. Peck. The meeting then went into committee on the subject introduced by Mr. Peck of the *National Insurance Act*, and a committee was appointed to confer and report at a later date.

TRADE NOTES.

MESSRS. IDRIS & CO., LTD., PRATT STREET, CAMDEN TOWN, LONDON, have been appointed purveyors to the refreshment department of the House of Lords.

P.A.T.A. PRICES.—The additions to the Protected List during May are: Bromley's additional preparations, Morlox preparations, Parke, Davis & Co.'s soft mass Blaud's pills, Purdie's fluid sulphur, Visem tablets, Warner Oliver dry shampoo, J. B. Williams' additional preparations, and Yardley's boracic oatmeal complexion soap. Robinss' preparations have been removed from the list.

GOLDONA PAPER.—We have recently had an opportunity of trying the improved "mauve label" Goldona paper which is now being produced by Messrs. J. J. Griffin & Co., Kingsway, London, W.C. The paper is self-toning and after printing requires simply to be fixed. The colour obtained is of the cold tone which so many people prefer, and we have found no difficulty in obtaining concordant results.

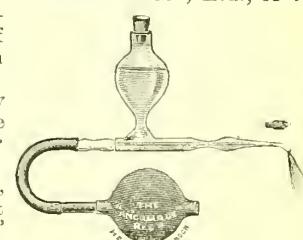
DRUGGISTS' SUNDRIES.—The Galen Manufacturing Co., Ltd., Wilson Street, New Cross, London, S.E., have issued a new edition of their price-list of druggists' sundries. The list is illustrated and seems to include all well-known lines in sundries sold by chemists. There are in addition many special dressings with which the name of the company has been associated for some years. A copy of the list will be sent to any of our readers who have not received one.

"**THE BOY IN THE TUB**" plaster-cast for Wright's Coal Tar Soap (see *C. & D.*, April 27, index folio 608) is now sent by Messrs. Wright, Layman & Umney, Ltd., 44-50 Southwark Street, London, S.E., with any order for a window-display quantity of the soap, which is a gross of boxes, and to this the company add two dozen boxes free as a bonus for the three weeks' window-display. They also offer an excellent selection of advertising material, of which particulars can be obtained from them on application.

ASTRINGENT JELLY.—Messrs. Arthur H. Cox & Co., Ltd., manufacturing chemists, Brighton, have introduced under this name a semi-translucent jelly, whose special purpose is to improve the complexion by removing wrinkles or assisting in the absorption of adipose tissue. The jelly is put up in collapsible tubes with ribbon discharge-hole, each tube being enclosed in a carton printed in yellow tones with black lettering. It retails at 9*½d.* per tube, the price to chemists being 4*s.* per dozen, and should sell when shown.

STEVENSON'S EXPORT PRICE-LIST.—Messrs. H. E. Stevenson & Co., 122 Great Suffolk Street, London, S.E., have issued the first number of their export prices-current, which contains a full list of the firm's drugs, chemical and pharmaceutical preparations. The more prominent lines to which reference is made include concentrated fruit and soluble essences, English tinctures, spirits and perfumes in bond, concentrated liquors for syrups, and compressed tablets. Other pages are devoted to packed goods, capsules, pills, emulsions, infants' food, and other specialities, the whole making a concise and complete list.

ANGULIQUE SPRAY.—This is the newest spray apparatus brought out by Messrs. C. J. Hewlett & Son, Ltd., 35 to 42 Charlotte Street, London, E.C. The form of the apparatus is shown in the illustration, while the advantage is that the spray can be directed upon one spot—of the pharynx, for example—rather than be diffused over a larger area, as is the case with most sprays. The "Angulique" is made of toughened glass, and is produced throughout in this country. Each spray is enclosed in a box, and, like all the company's sprays, it is moderately priced.



MESSRS. FORD, SHAPLAND & CO., PRINTERS, 6 GREAT TURNSTILE, HIGH HOLBORN, LONDON, W.C., have always made a speciality of fly-papers and their modern equivalent fly-catchers. Their latest production is the "Kach" fly-ribbon, which sells at a penny and takes the form of a carton measuring 3*½* in. long by 1 in. It contains a roll of sticky material spread on parchment-paper, with tag outside for pulling it out. Messrs. Ford, Shapland & Co. supply these at 6*s.* 6*d.* per gross. Chemists can obtain a sample and price-lists of these and other kinds of fly-catchers and papers from the firm on application. They are also issuing sample-books of chemists' demy and wrapping-papers, and of toilet-rolls and sanitary papers, the rolls being offered at prices from 2*s.* to 8*s.* per dozen.

National Health Insurance.

Advisory Committee.

The second meeting of this committee was held at the offices of the Civil Service Commission, Burlington Gardens, on Friday, May 17, Sir Robert Morant presiding. The sitting lasted from 11 A.M. to 5 P.M., the greater portion of the time being occupied with a discussion of the methods by which doctors should be remunerated under the Act. The general opinion seemed in favour of the capitation system and against the system of payment per attendance; but a third method, that of a State medical service, found some support by reason of the fact that it would obviate many administrative difficulties. The later part of the sitting was given over to the discussion of the method by which a list of medical men willing to serve upon local panels should be made up and communicated to the insured person in order that the latter might exercise his choice of doctor. Ultimately it was arranged that the Commission should see the medical members of the Advisory Committee alone on Friday, May 24, and should subsequently submit the points discussed to a meeting afterwards of the members of the Advisory Committee representing insured persons, the recommendations of both sections to be later on discussed by the whole committee.

On the motion for the Whitsun adjournment of the House of Commons on May 22, a discussion on the Act was initiated by Mr. Worthington Evans, M.P., and in his reply Mr. Masterman told how the Commissioners are progressing with the work. In the course of his remarks he said :

All the draft regulations necessary to bring the Act into operation were now, he thought, in proof; most of them had been approved by the Advisory Committee. He would not say a word at present about the doctors, because most amicable and friendly negotiations were proceeding between the representatives of the doctors on the Advisory Committee and the Insurance Commissioners, and he would not even by suggestion which might be misinterpreted do anything which might tend to give these negotiations a less favourable outlook. It was true there would be a waiting period during which persons would be paying in and not receiving benefit; but by the end of 1913 it was calculated by the Government actuaries that 800,000 mothers would have received maternity benefit to the value of 30s. by right of their husband's insurance, and another 100,000 mothers by right of themselves being insured; that 2,500,000 persons, men and women, would have received sick pay from the National Insurance scheme, and that at least a quarter of a million persons suffering from tuberculosis would have received treatment suitable to their case, and he thought that a very large number of those persons would find themselves practically restored to life after sentence of death as the result of the Act.

Speaking on Tuesday evening on the National Insurance Act at a meeting at Battersea, under the auspices of the Hearts of Oak Benefit Society, Mr. W. S. Glyn-Jones, M.P., said the country had been shocked by the *Titanic* disaster. It always was when men and women were killed in the mass, but little attention was paid to the isolated accident. The deaths from consumption in this country amount to a *Titanic* disaster every week. As many consumptives die each week as there were souls lost on the *Titanic*. The Government had ascertained that of those afflicted with consumption few but the first-class passengers—the comparatively wealthy—had a chance of escape in the life-saving boats. In the past the consumptive's chance of escape has largely depended on the length of his purse. The Government had found one and a half million to establish treatment for the million in the case of consumption. The Insurance Act provides an additional million a year for treatment, and something is now to be done to give the poor consumptive worker a chance equal to that now enjoyed by the rich of recovering normal health.

Employers and the Act.

A meeting of City employers was held under the auspices of the London Chamber of Commerce at Cannon Street Hotel, London, E.C., on May 20, when official representatives of the National Insurance Commission gave addresses on the administration of the new Act as affect-

ing employers of labour. The Pillar Hall was crowded. Mr. F. Faithfull Begg (chairman of the Chamber Council) presided. Mr. R. A. Robinson, D.L., was amongst those present. Sir Robert Morant answered questions, and the meeting was a success.

Pharmaceutical Committees.

A meeting of the Pharmaceutical Standing Committee on Insurance was held at 17 Bloomsbury Square, London, on Wednesday morning, May 22, Mr. P. F. Rowsell, Exeter, presiding. There were also present Messrs. Waring, Townley, Hagon, Francis, Trick, Carpenter, Last, Clarke, Harmer, Gibson, Cuff, Allen, Greenish, Harrington, Cockburn, Guthrie, Hill, Gilmour, J. C. Pentney, and the Secretary (Mr. W. J. Uglow Woolecock). The Chairman welcomed Messrs. Cockburn, Guthrie, and Hill, the new members of the Committee. Minutes and correspondence having been dealt with, the question of representation of pharmacists on the local Insurance Committees was discussed, and it was decided that the Insurance Commissioners be approached with a view to securing such representation, and that each local pharmaceutical association should be advised to approach the local authority with a view to securing representation. The Committee endorsed the recommendation of the Executive that the Standing Committee do not entertain the suggestion for the formation of an "Approved Society." The tariff for medicines was discussed and approved. It was decided that the Chairmen and Secretaries of each of the Pharmaceutical Insurance Committees form the Executive Committee of the Standing Committee on Insurance. The question of finance was remitted to the Executive Committee to be dealt with.

A meeting of the National Insurance Committee (England) was held at the same place in the afternoon of the same day. Messrs. Rowsell, Cuff, Campkin, Pentney, F. J. Gibson, Poole, Hind, Harrington, Greenish, Waring, Milne, Allen, Townley, Stiles, Trick, O. A. Clark, R. H. Bell, E. Carpenter, W. J. Hallett, R. F. Clarke, W. A. Bell, G. V. C. Last, W. A. Wynne, Edmund White, G. A. Harmer, and W. J. Uglow Woolecock were the members present. On the motion of Mr. W. B. Trick, seconded by Mr. J. F. Harrington, Mr. P. F. Rowsell, of Exeter, was appointed Chairman, and Mr. Woolecock Secretary. A long discussion took place on the question of a tariff, and on the motion of Mr. Pentney, seconded by Mr. Owen Clark, it was unanimously decided to approve the principle on which the tariff was based. The Committee then proceeded to discuss what should be considered "proper and sufficient drugs and medicines and prescribed appliances" within the meaning of the Act. Consideration was also given to Sub-sections 3 and 4 of Section 15 of the Act. A vote of thanks to the Chairman terminated the meeting.

COMING EVENTS.

Monday, May 27.

National Union of Assistant Pharmacists, Cobden Hotel, Birmingham, at 11.30 A.M. Annual meeting. Extracts from the agenda were published in the *C. & D.*, May 18, index folio 736.

Thursday, May 30.

Lewisham Pharmaceutical Association.—It is proposed to form an Association for Pharmacists residing in Lewisham, and a meeting with this object is to be held at 63 High Street, Lewisham, at 3 P.M. Those unable to be present should communicate with Mr. Charles Sayers.

Friday, May 31.

Drug Trade Appeal Fund.—St. Bride Institute, St. Bride Lane, Ludgate Circus, London, E.C., at 3.45 P.M. Annual meeting of subscribers.

PHARMACISTS' LAUNCH TRIP.—This annual function, in which several Chemists' Associations in London and district participate, is to take place on July 3. The train will be taken from Paddington to Maidenhead, from thence the launch trip will be to Marlow, where luncheon will be served; the journey will then be continued through Henley to Reading, special permission having been obtained to pass through the regatta course. The return journey from Reading is by train. Tickets (including luncheon, tea, and railway journey) 12s. 6d., from Mr. A. Higgs, J.P., Richmond Road, Kingston-on-Thames.

BUSINESS CHANGES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

Boots, Ltd., are stated to have taken a shop in Station Street, Spalding.

The branch of Boots, Ltd., in Market Place, Peterborough, is now open.

MR. C. H. LAMB has sold his drug business at 53 Wellington Lane, Hull, to Mr. J. T. Beech.

The business of Havill & Son, Tiverton, is now extinct. The shop is empty and about to be sold by auction. The drugs have been bought by a local chemist.

MESSRS. NORTHWAY & CO. (proprietor, Mr. T. H. Mallagh), shipping and dispensing chemists, are removing from 27 to 91 Great Tower Street, London, E.C.

UNITED DRUG CO., LTD., are closing their office at 19 and 20 Holborn Viaduct, London, E.C., and removing to an extensive warehouse at 114 Old Hall Street, Liverpool.

MESSRS. BUDDEN & CO., LTD., are opening an up-to-date pharmacy store at West Derby Road, Liverpool, in the premises recently vacated through illness by Mr. Palmer, chemist and druggist.

THE two firms Antoine Chiris, of Grasse, and Jeancard Fils, of Cannes, have amalgamated under the name of Etablissements Antoine Chiris & Jeancard Fils Reunis, with head office at 15 Rue Ballu, Paris. The capital of the new concern is 14,000,000 francs.

MR. JOHN LOWTHIAN POTTER, chemist-optician, late manager to Messrs. Frazer & Green, Ltd., Buchanan Street, Glasgow, has purchased the business at Alsager, Cheshire, of Mr. S. Biggin, chemist and druggist, who is retiring. The wine-licence connected with the business has been transferred to Mr. Potter.

PERSONALITIES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

MR. W. PILKINGTON, chemist and druggist, Buxton, has been elected a member of the committee of the newly formed Chamber of Trade for the Buxton district.

MR. WOOLMER WHITE, J.P., of Timothy White Co., Ltd., has been elected to fill a casual vacancy on the Warblington division on the Hampshire County Council.

MR. SAMUEL W. FAIRCHILD, of New York, arrived in London this week, and attended Professor Perkin's second lecture on the Synthesis of Terpenes on Thursday evening.

COLONEL SIR DAVID BRUCE, C.B., F.R.S., has been specially promoted by the King to the rank of Surgeon-General in consideration of his eminent services in the cause of science.

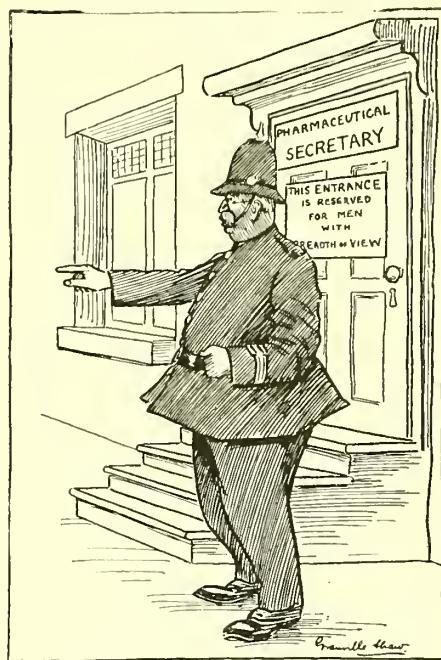
ALDERMAN EVAN J. DAVIES, chemist and druggist, of The Glyn, New Quay (Card.), has been elected Chairman of the Cardiganshire County Council. Alderman Davies was elected to the County Council twelve years ago.

MR. N. C. POLSON, of Messrs. N. C. Polson & Co., wholesale druggists, Kingston, Ontario, is now in London with Mrs. Polson and his daughters. They have spent the past two months on the continent of Europe, and expect to be in London for another fortnight.

THE portrait of Lady Barclay, of The Uplands, Blackwell, by Mr. A. P. Nowell, the companion picture to the presentation portrait of Sir Thomas Barclay (*C. & D.*, 1911, II., 143), is exhibited in the Royal Academy. It is No. 750 in Room X, and is beside a portrait of the Lord Chancellor.

SERGEANT-MAJOR D. LLOYD JONES, of the Royal Gloucestershire Hussars and Hon. Secretary of the Newport Pharmacists' Association, while doing his annual drill at the Duke of Beaufort's Park was thrown from his horse. He unfortunately received a slight concussion and broke his right clavicle. This is Mr. Jones's first accident for fourteen years. He will be incapacitated for a few weeks.

MR. J. R. BAILEY, Secretary of the St. Vincent Association, 13 Devonshire Square, London, E.C., appeals for votes for the forthcoming election in June to the Commercial Travellers' Schools on behalf of Harold Nugent Upton. This candidate is the son of the late Mr. A. A. Upton, who represented John Morgan Richards & Sons, Ltd., for eleven years, and previously travelled for the J. B. Williams Co.



P.C. ALLEN ON DUTY ONCE MORE.

The "Pharmac. Zeitung," referring to the advertisements of Council candidates, says: "Every country has its customs. What indignation would be caused here [Germany] if a candidate for membership of the committee should recommend himself in the advertisement pages of a technical journal! But the publicity of the whole proceeding appears to us highly praiseworthy."

Athletics and Sport.

ALLENBURY SECOND met the Y.M.C.A. Second in a cricket match at Parliament Hill on May 18, and were defeated by 73 runs to 50.

THE TWENTY-FIRST ANNUAL SPORTS MEETING of the Edinburgh Pharmacy Athletic Club will take place at the Marine Gardens, Portobello, on the evening of June 5.

THE CRICKET MATCH in the Wholesale Chemists and Druggists' Championship played at Crofton Park on May 18 between The British Drug Houses C.C. and Burgoyne's C.C. resulted in a win for the latter team by 93 runs to 66. Gardner scored 30 runs for the winners and Farr 18 for the losers.

A MATCH between the Sheffield Chemists' Cricket Club and the Central Hall C.C. (Sheffield) took place on May 16 under adverse weather conditions. The Central Hall were cheaply dismissed for 38 runs, Knowles taking five wickets for 18 runs and Grigson five for 15. Stumps were drawn when the Chemists had made 59 for four wickets, Massey (37 not out) being the chief scorer.

AT THE SPRING MEETING of the Chester Golf Club held last week, Mr. E. H. S. Evans, aged nineteen (son of Mr. William P. Evans, President of the Drug Club), with a handieap of 16, won the "Yerburgh" Challenge Cup, with silver memento; the second-class Handicap Prize; and the first sweep of the day. His score was 90-16=74 net. At the Club dinner held at the Grosvenor Hotel, Chester, the Captain (Mr. William P. Evans) presided over a company of nearly a hundred members and their friends, including several captains and ex-captains of various clubs. The toast of "The Visitors" was responded to by Mr. Ralph K. Harvey (The British Drug Houses, Ltd.), ex-captain of the Mid-Surrey Golf Club.

TRADE REPORT.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, London, E.C., May 23.

BUSINESS has slackened off this week in view of the approaching Whitsuntide holidays, and to the fact that the renewed trouble at the docks is causing great inconvenience in the receipt and delivery of goods. A fair number of price-alterations have taken place, including an international advance in bromides. Quinine has been firmer in the interval, aided by the small bark shipments, but generally the market is quiet; at the Loudon auction on Tuesday bark advanced about 10 per cent. Acetic-acid makers are asking an advance more in accordance with ruling prices of lime-acetate. Both citric and tartaric acids are very scarce on spot, and makers are practically off the market *pro tem.* Cocaine is nominal and tending easier; quicksilver is the turn cheaper in second-hands. In drugs and essential oils the market has been cleared of buchu for export, and price of round leaf is now nominal. Soudan acacia-gums are dearer. Opium is tending lower. Menthol is firm and refined camphor steady. Cod-liver oil has a firmer tendency in some quarters, but it is not general. Lemon, bergamot, and orange oils are offered at lower rates from primary markets. Extreme prices have been paid for linseed oil owing to the Dock trouble, and the market closes excited. The chief movements are as under :

Higher	Firmer	Easier	Lower
Acetic acid	Ammonia sulphate	Cocaine	Bergamot oil
Arsenic	Citric acid	Copper sulphate	Isinglass
Bromides	Musk	Ergot	Lemon oil
Buchu	(Tonquin)	Nutmegs	Orange oil
Cinchona (auction)	Quinine	Opium	Pimento
Glycerin (crude, 1913)	Rape oil	Quicksilver (seconds)	
Gum acacia (Soudan)	Soya oil	Soda nitrate (Liverpool)	
Linseed oil		Tangerine oil	

Cablegrams.

BERGEN, May 22.—The cod-fishing at Finmarken is variable owing to stormy weather. The market for finest non-congealing oil is firmer at 61s. per barrel c.i.f. terms.

NEW YORK, May 22.—Business in drugs is fair. Opium is quiet and unaltered at \$6.25 per lb. The bromides have been advanced by 2c. per lb. with the exception of granulated potassium, which is unchanged at 31c. Balsam tolu is firm at last week's advance to 75c. Balsam Canada has advanced to \$4 per gal. Peppermint oil is steady at \$2.85, in tins. Round buchu has advanced to \$1.40. Jalap is firmer at 22c. per lb. Cascara sagrada is steady at 8½c., and Cartagena ipecacuanha is firm at \$1.95 per lb.

London Markets.

ACETIC ACID.—The strong upward tendency noted a fortnight ago has crystallised into an advance of about 30s. per ton, makers now asking 38d. for glacial.

ALOES.—The Cape aloes bought in at last week's auction has been cleared at full prices, about 50 cases being disposed of by two brokers. It is difficult to effect sales in Curaçao aloes at the present high prices, which are,

however, quatably unchanged. About 25 cases Zanzibar skin aloes have arrived from Aden.

The exports from the Union of South Africa during March amounted to 24,005 lb. (221.), against 53,499 lb. (539.) during 1911; during the three months ending March the exports were 108,811 lb. (1,031.), against 207,774 lb. (2,045.) in 1910.

ARSENIC is very firm owing to the good demand. Best white Cornish powder is quoted at 15l. 10s. in barrels and 16l. 10s. in kegs.

ASAFETIDA.—About 100 cases ex last week's auction have been sold.

BENZOIN.—No arrivals have taken place; there is a fair demand privately at between 6l. 10s. and 8l. 5s.

BERGAMOT OIL is cheaper, 38 per cent. esters offering at 27s. 9d. per lb. c.i.f.

BROMIDES.—On Friday last (May 17) the British and German makers announced an all-round advance in bromides, potassium being 3d., sodium 3½d., and ammonium 4d. per lb. higher. The revised prices for 1-cwt. lots are—potassium 1s. 6½d., sodium 1s. 10d., ammonium 2s. per lb. net cash; smaller quantities are 1½d. and ammonium 2d. per lb. extra. The previous advance in bromides was in February 1911, when makers raised their quotatious of potassium by 3d. Foregoing prices are for prompt delivery only, no contracts being made. From second-hands, business has been done at from 1s. 5d. to 1s. 6d. for potassium, but only limited quantities are available from these sources. It will be noticed from our cable that prices in the U.S.A. (with the exception of granulated potassium) have been advanced 2c. per lb.

BUCHU.—Dearer. Renewed demand on the part of the United States has led to the clearance of the first-hand market in round leaves, and during the past fortnight about 30 bales have been sold at mostly 5s. per lb. There are only two or three bales now left of this description, and the nominal price of these is 6s. Genuine longs are unobtainable, and for stalky from second-hands 3s. is asked, while ovals are also in small compass, sales having been made up to 1s. 10d.; very little of this description has been gathered at the Cape. We understand that 5s. 6d. c.i.f. has been paid for a small parcel of round leaves afloat from the Cape, and that this figure has also been refused; in fact, the primary market is offering very little. The usual Cape boat brought three bales of ovals only.

The exports from the Union of South Africa during March amounted to 25,228 lb., valued at 4,491., as compared with 13,585 lb., valued at 2,166., during 1911. During the three months ending March the exports were 111,838 lb., valued at 17,810., as compared with 68,789 lb., valued at 10,115. in 1911.

CAMPHOR (CRUDE).—Small spot sales of China have been made at 155s., and for shipment 160s. c.i.f. is quoted.

The American Consul at Tamsui states that "for the last few years the Camphor Monopoly Bureau has shipped all crude camphor to private refineries in Japan. Now it will resume camphor refining at the Monopoly Bureau in Taihoku. The experimental refining that has been carried on for several months has proved much more successful than the doubtful process attempted several years ago. New evaporators and other machinery are to be installed shortly in order to increase the limited output. The amount of camphor refined since last September was 1,000,000 lb., but by the contemplated improvements the Monopoly Bureau estimates the production for the fiscal year, March 1912 to March 1913, at 5,000,000 lb."

CAMPHOR (REFINED) is steady, with sellers of 2½-lb. slabs at 1s. 6½d. c.i.f. for May-June shipment; ¼-oz. tablets have been sold at 1s. 7½d. c.i.f.

CARDAMOMS.—About 150 packages have arrived since the auction, including 120 from Calicut.

CASCARA SAGRADA.—Rather more inquiry is reported, the value of new bark being 39s. 6d. to 40s. and old 42s. 6d. on the spot; 235 sacks have arrived in Liverpool.

CASTOR OIL.—Steady. Hull make is quoted at 29l. for first pressing for prompt to December, and pharmaceutical quality is 31l. 10s. in barrels delivered free on wharf London; oil in tins and cases 50s. per ton extra. In Liverpool good seconds Calcutta is quoted 4d. on spot and 5½d. per lb. forward.

CHAMOMILES are becoming scarce on the spot, the value of fair Belgian being about 130s. per cwt.

CHIRETTA.—Five bales have arrived from Calcutta; 8d. is asked from second-hands.

CINCHONA.—At the London auction on Tuesday, 639 packages were offered and 500 sold at higher prices, the average unit being 7d., against 3d. at the previous sale, or equal to the Dutch parity of 4.80c., against 4.40c. Of East Indian 412 packages offered and 340 sold, including Crown fair natural quill, 5d.; Madras quilly chips, 2½d. to 3½d.; stem chips and shavings, 1½d. to 5d.; root, 3d. to 5½d. Ledgeriana, stem chips, 3½d., and branch, 2½d. Sucirubra, stem chips and shavings, 1½d. to 2½d., and branch 2d. Hybrid, stem chips, 2½d.; root, 3½d.; and branch, 1½d. to 2½d. Of Java, 205 bales offered and 160 sold, at 6½d. for Ledgeriana root, and 4½d. to 4½d. for branch. The shipments of bark from Java to Europe during the first half of May amounted to 402,000 Amst. lb., against 805,000 Amst. lb. for the corresponding period of 1911, 535,000 Amst. lb. for 1910, and 438,000 Amst. lb. in 1909.

CITRIC ACID is very firm, both English and foreign being quoted 1s. 4½d. for either from second-hands.

COCA-LEAVES.—The arrivals comprise 69 packages from Colombo and 50 bags from Mollendo.

COCAINE.—Prices are more or less nominal in the absence of demand, hydrochloride offering at 7s. 2d. per oz. net.

COP-LIVER OIL. In London, agents report the market as steadier; the lowest quotation for prime new oil is 57s. c.i.f., from which quotations run to 61s. per barrel. At the close our Bergen cable gives the market as "firmer."

Our Bergen correspondent writes on May 20 that, owing to stormy weather and holidays, the Finmarken cod-fishing last week gave but a moderate output, but there is still hope for continued good fishing as soon as circumstances are more favourable. To-day's report gives the following details:

	1909	1910	1911	1912
Catch of cod (millions)	51.7	49.5	53.4	81.9
Yield of e.l.o. (hect.)	46,800	37,500	36,000	61,300
Livers for "raw" oils (hect.)	24,500	16,000	9,700	21,800

Very little business is being done on the market, and the previous quotation of 60s. per barrel c.i.f. is nominally maintained.

According to cabled advices received from Norway, the catch and output of cod-liver oil up to May 18 was as follows:

	Catch of Cod	Livers for Raw Oils (hect.)	Yield of e.l.o. (hect.)	c.l.o. (hect.)
Finmarken, 1912	19,460,000	... 14,400	... 11,137	
1911	18,730,000	... 4,414	... 12,276	
Whole Country, 1912	81,900,000	... 21,821	... 61,343	
" 1911	53,400,000	... 9,678	... 36,035	

COPPER SULPHATE is cheaper, ordinary Liverpool brands offering at 23d. 15s. and June at 23d. 12s. 6d. per ton.

DRAGON'S-BLOOD.—About 12 cases of Singapore lump are close at hand.

ERGOT.—With sellers anxious to make progress, good sound Russian is offered at 3s. per lb. spot.

GAMBOGE.—An arrival of 12 cases Siam pipe has taken place.

GERANIUM OIL.—The British Consul at Réunion (Bourbon) reports that some 45 tons were exported during 1911, as against 64 tons in 1910. Many new plantations have been started, but the Consul is of opinion that this cultivation has seen its best days. The local price varied between 28fr. (22s. 6d.) and 41fr. (32s. 10d.) per kilo.

GLYCERIN.—It is not anticipated by those who have inside knowledge that there will be any further changes in the official price of double-distilled on the part of the Glycerin Association for several months—perhaps not for the remainder of the year. A fair business has been done at the official rates, and buyers are said to have filled their requirements. Crude for delivery over 1913 has advanced by 4d. per ton. The official price of chemically pure (s.g. 1.260) for five-ton contracts in tins and cases is 91s. per ton.

GUM ACACIA.—Soudan sorts are dearer, the sales including May-June at 44s. 3d. to 45s. c.i.f. terms for shipment from Khartoum; the spot value of fair hard sorts is from 45s. to 46s., and palish to good pale soft sorts, 60s. to 67s. 6d. per cwt. Senegal gum is scarce and dearer at

from 43s. 6d. to 44s. 6d. per cwt. f.o.b. Bordeaux. The Sudan Railway extension from Khartoum is now through to El Obeid, the capital of Kordofan. The line was open for traffic from January 1 this year.

IPECACUANHA.—Quiet, with small sales of cultivated Minas at 8s. 6d.; a few bags of Cartagena have arrived.

ISINGLASS.—At auction 707 packages were offered, of which about 450 sold at irregular but lower prices.

KOLA.—At auction in Liverpool 13 bags African dried sold at 3d. per lb. ex quay.

LEMON OIL.—Spot prices show a reduction of about 3d. per lb., good brands offering at 5s. 9d. From primary markets lower offers have been received, including 5s. 11d. c.i.f. for prompt shipment.

MENTHOL is firm, but quiet. Some business for April-May shipment was done early in the week at 25s. 7½d. per lb. c.i.f. for Kobayashi and Suzuki in equal quantities of menthol and oil. Subsequently there were buyers of October-December at 22s. c.i.f. Spot price is 22s. 6d. to 22s. 9d.

MORPHINE is in slightly more inquiry, makers quoting 12s. per oz. for hydrochloride, and second-hands slightly less.

MUSK.—Tonquin pod is firmer, with very small supplies. Thin skin blue pile 1 is quoted 82s. 6d. and old-fashioned pile 1 65s. per oz.

NUX VOMICA.—Arrivals from various Indian ports, amounting to about 1,700 packages, have taken place; also 640 packages in transit.

OILS (FIXED).—Linseed shows a sharp advance on spot owing to the dock trouble, and very high prices have been paid, the market to-day (Thursday) closing excited. The London spot price in pipes at waterside is 45s., and in barrels 46s. per cwt. Rape has advanced 1s. per cwt. to 33s. 6d. for ordinary brown in barrels, and to 34s. 3d. for English refined in casks. Soya oil is 6d. dearer at 29s. 9d. in barrels on spot. Cottonseed is quiet, crude offering at 27s. 9d., ordinary pale at 28s. 6d., and sweet refined at 32s. 6d. per cwt. Cochin Cocomut is also quiet at 46s., and Ceylon at 41s. spot. Palm oil is quoted in Liverpool at 28s. 6d. for Lagos and 32s. spot. China Wood oil is quiet at 40s. spot. Petroleum is steady at 8d. to 8½d. per gall. for Russian, 8½d. for ordinary refined American, and 9½d. for water-white. Turpentine is about 9d. easier on the week, closing at 35s. 9d. for American on spot.

OLIBANUM is steady, with small sales of fair siftings at 21s. and good garblings at 27s. per cwt. on the spot.

ORIUM.—The market is in a somewhat puzzling position, inasmuch as we understand business has been refused in Turkey, for forward delivery, sellers only being willing to accept orders for prompt shipment, this being offered at from 16s. 6d. to 17s. per lb. c.i.f. for 11½ per cent.; the spot value of Turkey druggists' is about 18s. 6d. to 19s. The latest reports in regard to the crop-outlook are not so-favourable, and the fact that reasonable bids have been offered rather favours the idea that it may be an indifferent outturn.

A Smyrna correspondent writes on May 10 that the week has been again very quiet, only one basket of new Yerli t.q. changing hands at 18s. per lb. c.i.f. An American buyer offered about 15s. 6d. for new 10½ per cent. Karahissar t.q., but without result, and it is a question whether 18s. would tempt sellers. The weather has turned abnormally cold, a most unusual thing at this season, and this will further retard the harvesting of the crop. The arrivals in Smyrna to date amount to 1,175 cases, against 4,524 cases at the corresponding period last year.

ORANGE OIL is about 4d. per lb. cheaper for shipment from Sicily at 7s. 10d. for sweet and 8s. for bitter.

ORRIS is in fair demand and firm. Florentine is quoted 51s. to 52s. for good sorts on c.i.f. terms.

PAREIRA BRAVA.—An arrival of six tons has taken place in Hamburg.

PEPPERMINT OIL.—Small sales of Japanese dementholisised have been made at 6s. 6d. spot, and for August-October 5s. 4½d. c.i.f. has been paid, but this cannot be repeated; H.G.H. is firm at 15s. 3d., without business; 81 cases Japanese have arrived via Havre.

QUICKSILVER.—The principal importers' price is unaltered at 8*l.* 5*s.*, and second-hand holders offer at 8*l.* 1*s.*, or 6*d.* per bottle easier.

QUININE.—The small bark shipments for the first half of May helped to maintain the firmer tone in second-hands noticed at the close of our last report, but on the whole the market has been quiet and little business done. During the interval small sales of the usual German brands of sulphate have been made at 8*l*.*6d.* spot, and October delivery at 9*l*.*6d.*, but sellers now ask 9*d.* for spot, 9*l*.*4d.* for October, and 8*l*.*2d.* to 8*l*.*6d.* for Amsterdam and Java, according to seller. The next Amsterdam bark-auction on June 13 will probably be large, a fair proportion of which will be of old import and second-hand parcels, and held for high limits.

During the three months ending March the exports of "quinine, quinine salts, etc." from Germany were as follows :

	1910	1911	1912
Kilos.	60,100	48,400	58,900
Marks	1,382,000	1,173,000	1,396,000

SARASPARILLA.—The arrivals comprise 28 bales of grey Jamaica, 10 bales Lima-Jamaica, 12 of native Jamaica, and 10 of Mexican.

SENNA.—The *Clan Shaw* has brought 104 bales Tinnevelly from Tuticorin. There is a scarcity of the better grades of bold Tinnevelly leaf, also of Alexandrian pods, for which there is inquiry.

HELLAC remains very quiet, fair TN orange offering at 64*s.* per cwt., May-June shipment at 63*s.* 6*d.* c.i.f., and AC Garnet at 59*s.* c.i.f.

SODA NITRATE.—Liverpool market is easier at from 11*s.* to 11*s.* 3*d.*, but London is unchanged at 11*s.* 3*l*.*6d.* for ordinary and 11*s.* 6*l*.*2d.* for refined.

SPICES.—At auction Jamaica *Ginger* was steady, 88 barrels selling without reserve at 55*s.* to 55*s.* 6*d.* for good common; 36 bags of washed rough Cochin sold at 41*s.* to 43*s.*; Calicut in cases was bought in at 90*s.* for bold cut, 78*s.* for medium, and 62*s.* 6*d.* for small; fine bold brown Calicut was bought in at 47*s.* and D rough at 42*s.* 6*d.* For African ginger 28*s.* is wanted in Liverpool; 115 tons new crop have been sold there at from 25*s.* 6*d.* to 27*s.* 6*d.* Fair *Pimento* sold without reserve at 2*l*.*2d.* for 186 bags. *Nutmegs* easier, 56 boxes Singapore selling without reserve at 6*l*.*2d.* to 7*d.* for 78*s.*; 34 packages W.I. also sold at steady rates. Eleven packages West Indian *Mace* sold at 2*s.* 3*d.* for fair, 2*s.* 2*d.* for red, and 2*s.* for broken. Fine red Japanese *Capsicums* (100 bags) were bought in at 40*s.*, and 138 bags fair *Cinnamon* quillings at 10*l*.*7s.*, and 100 bags chips at 2*l*.*2d.* for fair. Of Zanzibar *Cloves*, 25 bales were bought in at 7*l*.*4d.* for fair bright; privately, the spot price is 7*l*.*4d.*, closing firm. The offerings of *Pepper* were all bought in; privately the spot price of fair Singapore is 5*l*.*5d.*, and that of white Singapore 8*l*.*6d.* per lb.

SULPHUR is firm, flowers offering at from 6*l.* 8*s.* 9*d.* to 6*l.* 10*s.*, and roll at 6*l.* 3*s.* 9*d.* to 6*l.* 5*s.* ex wharf London. In Liverpool 5*l*. 17*s.* 6*d.* per ton c. and f. is quoted for flowers and roll.

TANGERINE OIL is offered at the easier rate of 22*s.* 6*d.* c.i.f. for finest.

TARTARIC ACID remains very scarce for prompt delivery, the price of the foreign being 1*s.* 0*l*.*2d.* English is quoted 1*s.* 1*d.* nominally, but makers have practically nothing to offer at the moment.

VANILLA.—During 1911 the exports from Réunion (Bourbon) were 51 tons, against 51 tons in 1910, 39*l*.*2* tons in 1909, 70 tons in 1908, and 48*l*.*2* tons in 1907. The British Consul reports that the outlook for vanilla is more hopeful this year than last, though until the number of plantations throughout the world has been reduced to the number required by the demand, not much profit can be expected from a vanilla plantation, though as a secondary product it is very paying.

WAX (VEGETABLE).—The spot value of Japanese slabs is from 44*s.* to 45*s.* per cwt.; for arrival 43*s.* c.i.f. has been paid. Waxy-grey *Carnauba* is quoted 159*s.* spot.

YLANG-YLANG OIL.—During 1911 the exports from Réunion (Bourbon) amounted to about 1,653 kilos., or 36,366 lb. The price fell from 200fr. (8*l.*) per kilo. in

1910 to 180fr. (7*l.* 4*s.*) in 1911. Over-production has led to a steady fall in prices during the past six years, as shown by the following figures : 1906, 650fr.; 1907, 500fr.; 1908, 450fr.; 1909, 300fr.; 1910, 200fr.; and 1911, 180fr. per kilo.

Manchester Chemical-market.

May 21.

There is a quiet feeling in heavy chemicals, no doubt due to the coming Whitsuntide holidays, which may be fitly described as the great Lancashire carnival. White caustic soda, 7*s.* to 7*l*. per cent., is quoted 10*l.* 12*s.* 6*d.* to 10*l.* 15*s.*; 7*s.* to 7*l*. per cent., 9*l.* 12*s.* 6*d.* to 9*l.* 15*s.*; and 60 to 62 per cent., 8*l.* 12*s.* 6*d.* to 8*l.* 15*s.* Ammonia alkali, 48 per cent., 4*l.* to 4*l.* 5*s.* per ton, in bags. Bicarbonate of soda, 4*l.* 7*s.* 6*d.*; industrial, 3*l.* 17*s.* 6*d.*; and tinted, 3*l.* 7*s.* 6*d.* Bleaching-powder, 4*l.* 2*s.* 6*d.* to 4*l.* 7*s.* 6*d.* per ton for soft-wood casks on rails. Soda crystals, 40*s.* to 42*s.* 6*d.* per ton on rails, in bags. Sulphate of copper still remains an uncertain quantity, and, speaking generally, is 2*s.* 6*d.* per ton lower on the week, this notwithstanding the continued appreciation of metal—say, 24*l.* 5*s.* to 24*l.* 7*s.* 6*d.* per ton, best brands, delivered Manchester. On "Change, however, it was admitted that demand was at a low ebb, although it was reported that it was not very easy to obtain deliveries quickly; a great lack of interest was shown by buyers, with very little new business to report. Nitrate of soda was firm, as also sulphur of all descriptions. Pure aniline oil is quoted 5*d.*, and salt 5*d.* to 5*l*.*4d.* Tartarie and citric acids are scarce and favouring sellers. Glauber salts is 42*s.* 6*d.*; Epsom salts, 65*s.* to 80*s.* per ton in casks and barrels, for export. Black oxide of manganese, 94 per cent., 29*l.* to 30*l.*; 80 to 85 per cent., 6*l.*; 70 per cent., 5*l.*; and 60 per cent., 4*l.* 5*s.* per ton. In coal-tar products there is little change on spot. Sulphate of ammonia is 14*l.* 12*s.* 6*d.* to 14*l.* 13*s.* 9*d.* per ton, f.o.r. Manchester.

Heavy Chemicals.

Business in the heavy-chemical market varies somewhat from a comparative point of view at the different centres, but there is no doubt that in the aggregate the late activity is well maintained. There is a strong demand both for home and export, particularly on contract account, which shows that main consumers are well employed and points to a continuation of present conditions. Makers are gradually working off arrears of orders, but in many cases find it impossible to get a little stock in hand. Values are well maintained, and, generally speaking, are on the firm side.

ALKALI PRODUCE.—Recent quotations rule, and there is a brisk demand for bleaching-powder, caustic soda, salteake, and soda crystals. Chlorates and prussiates are on the firm side, with steady demand. Ammonia alkali is rather quiet.

BENZOLs maintain a steady tone. Present naked figures: London, 90 per cent., 1*s.*, and 50 per cent., 11*d.*; North, 11*d.* and 10*d.* to 10*l*.*2d.* respectively.

BICHROMATES OF POTASH AND SODA are in fairly steady demand at unaltered figures. Bichromate of potash, English and Scotch deliveries, 3*l*.*2d.* per lb., less 5 per cent., and export 3*l*.*4d.* per lb. net, f.o.b. Glasgow. Bichromate of soda, English and Scotch deliveries, 3*d.* per lb., less 5 per cent., and export 2*l*.*2d.* per lb. net, f.o.b. Glasgow.

SULPHATE OF AMMONIA.—This market is firmer again, and values stand a shade better. Present nearest figures: Beckton, prompt, 25-per-cent. ammonia guaranteed, 14*l.* 5*s.*; London terms, 15*l.* 18*s.* 9*d.*; Leith, 15*l.*; Liverpool, 15*l.*; and Hull, 14*l.* 17*s.* 6*d.*

Continental Drug and Chemical Markets.

CITRIC ACID.—The Hamburg market is quiet but firm. Spot is quoted at 287.50m. per 100 kilos.

COCAINE.—Hydrochloride is offered at easier rates, being obtainable at 235m. per kilo., with the possibilities of a further decline.

DEXTRIN.—Holders only offer sparingly, as they do not expect supplies to last until the new crop; the new product will not be obtainable at much lower prices, owing to the expected large demand for the article. Consumption is backward, and buyers show no interest for forward delivery.

ERGOT.—In consequence of larger supplies offered the market is dull, and German is obtainable at 5.40m., Russian at 6m., and Spanish at 7m. per kilo. net, ex Hamburg warehouse. The larger offerings were caused by Russia and Spain placing quantities they had been holding back, and a further decline may be expected if consumers continue to hold off.

FORMALDEHYDE.—Since the beginning of the year prices have been very depressed, this being ascribed to keen competition among makers, with the result that it barely pays to manufacture.

GLYCERIN.—Market continues very quiet, with buyers and sellers holding aloof, the small sales being almost exclusively for spot. Saponified glycerin (spot) is quoted 145fr.; delivery during 1912, 142.50fr.; 1913, 140fr. to 137.50fr.; crude glycerin, 80-per-cent., spot price and delivery during 1912, 122.50fr.; 1913, 120fr. These prices are for unpacked goods per 100 kilos., in buyers' own casks f.o.b. Marseilles, usual terms.

The Dock Strike.

About 20,000 riverside workers—lightermen, tugmen, carmen, and others—have been on strike at the Docks this week, and to-day (Thursday) matters have assumed a serious aspect, as a general strike has been decided on by the Transport Workers' Federation, the members of which cease work to-night. At the time of writing the indications are that all work at the Port will come to a standstill, as the unrest has rapidly spread and the situation is complicated. The drug-sales will be held as usual next week, and will consist of new goods only.

Java Cinchona.

The report for 1911 of the West Java Cinchona-planting Co. states that the company had during the year 940.75 bouws (1 bouw = 1.75 acre) under cultivation, of which 147.5 were under cinchona, 728.75 under tea, and 54.5 under timber, the remaining 10 bouws being occupied by nurseries for tea and albizzia, the latter being grown for timber. The area under cinchona shows a reduction of 12.75 bouws as compared with the previous year, and of this 11 bouws were put under tea. The plantations are all reported to be in a satisfactory state, less trouble having been experienced with disease than usual. The yield of cinchona-bark was 60,603 kilos., as against 50,000 kilos. estimated. The bark was sold in Amsterdam at 3 cents per unit per cent. of quinine sulphate, the average content of the latter being 7.75 per cent., compared with 5.82 in the previous year. The tea harvest, which was estimated at 400,000 half-kilos., amounted actually to 444,402 half-kilos., which was sold at 39.46 cents per half-kilo, in Batavia, which compares with 37.3 cents obtained in 1910. The profits of the undertaking amounted to 45,854 florins, of which 990 were put aside for working expenses, 697 were carried forward, and 2,916 added to the reserve. The rest was distributed in dividends and bonus, the total distribution being equal to a 12-per-cent. dividend on the capital.

Olive-oil Market.

Marseilles, May 17.

The general tendency of the olive-oil producing markets is upwards. This movement first had its origin in Spain and Tunis, and then extended to other producing countries. It was caused by the fact that "extra" qualities are rather scarce, prices for these being very firm, and when the demand came along the market advanced. To-day's quotations, ex warehouse, are as follows:

Fr.

Aragon extra	150 to 155	Molfetta	175 to 185
" fine	140 to 145	Sfax (in bulk)	130 to 140
Borjas extra	135 to 140	Sousse (in bulk)	135 to 142
" fine	130 to 132	Medhia	128 to 134
Tortosa	135 to 140	Monastier	128 to 132
Andalusia	120 to 125	Tunis	130 to 138
Levant surfine	125 to 128	Algérie extra	wanting
" fine	110 to 120	" surfine	125 to 130
Corfou	wanting	Corsica	115 to 120
Kalamata	128 to 130	Bouches du Rhône wanting	
Bari	wanting	Var	wanting
Bitonto	175 to 185		

Prices are expected to remain at about this level, especially if the olive-blossom, which will soon appear, should prove to be poor. The prospects of a substantial decline are therefore slight, especially as the stocks in the producing countries are mostly in the hands of wealthy proprietors, who will not part with their oil at low prices.

Spanish Saffron for U.S.A.

The American Consul at Valencia states that the direct export business with the United States is comparatively unimportant, and its development is said by local shippers to be affected by the sales terms made necessary by American entry requirements under the provisions of the Pure Food and Drugs Act. American importers decline to contract or pay for saffron except on the guaranteed condition that the product will pass the Department of Agriculture's test as to purity on arrival, and Valencia merchants in the saffron trade are, as a rule, small men, who are financially unable to accept the condition of deferred payment until the arrival and entry of shipments one or two months after date of export. The small amount of saffron shipped direct from Valencia to the United States is usually sold on firm orders,



Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest.

Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed.

Storax.

SIR.—Since the publication in THE CHEMIST AND DRUGGIST, March 16, 1912, of a note on "Storax," we have had occasion to examine nine other samples, each representing a considerable bulk and yielding figures which confirm in a striking manner the wide variation which exists between genuine storax and impoverished storax and also the statement which we made that genuine storax of excellent quality is still obtainable.

Sample	Acid-value	Ester-value	Saponification-value	Total Cinnamic Acid
No. 1	... 105.6	... 78.9	... 184.5	1 less than 3%
No. 2	... 70.7	... 119.4	... 190.1	23.77%
No. 3	... 78.2	... 109	... 187.2	25.49%
No. 4	... 71.1	... 117.8	... 189.8	30.78%
No. 5	... 95.0	... 31.6	... 126.6	5.4%
No. 6	... 70.5	... 120.8	... 191.3	30.77%
No. 7	... 78.5	... 109.9	... 188.4	28.23%
No. 8	... 68.8	... 121.8	... 190.6	28.19%
No. 9	... 70.2	... 117.0	... 187.2	30.56%

It will be seen that while samples Nos. 1 and 5 are clearly greatly impoverished, the other seven samples represent storax of excellent quality, and in three cases the total cinnamic acid actually exceeds 30 per cent.

It may be worth while to point out that not only does the genuine storax as imported command a figure very much higher than that of the impoverished storax, but also it yields a considerably smaller proportion of styrax preparatus, so that prepared storax of the best quality costs no less than double the price of a product correspondingly prepared from the impoverished imported article.

Yours faithfully,

CHARLES ALEX. HILL,
Analytical Laboratory,
T. TUSTING COCKING,
The British Drug Houses, Ltd.

The B.P. and "Squire."

SIR.—My attention has been called to the report of the evidence given by the medical editor of the British Pharmacopœia, Dr. Nestor Tirard, before the Select Committee on Patent Medicines, which is recorded in THE CHEMIST AND DRUGGIST of May 18. There are two statements in this evidence to which I take exception, and they are :

- (1) That Squire's "Companion to the British Pharmacopœia" is largely a reprint of the British Pharmacopœia.
- (2) That a request was ever made by the proprietors for the inclusion in the Pharmacopœia of a formula for solution of bimeconate of morphia.

The first statement was made in reply to a question by Mr. Marshall Hall regarding works of reference other than the B.P.; the second, when answering an inquiry as to how general acceptance of a remedy was obtained for the British Pharmacopœia. Dr. Tirard mentioned that

"No payment was made by the proprietors, although some have asked to have their preparations included, and then have advertised the fact, referring as an example to bimeconate of morphia, which was introduced, and then the proprietors inserted full page advertisements in the journals to say that the Pharmacopœia solution was not identical, and was far inferior to the original make."

That the statement regarding Squire's "Companion" is not borne out by actual experience may easily be proved by anyone who takes the trouble to critically compare the latest edition of this work with that of the British Pharmacopœia. For those who do not yet possess a copy

of my work, the following brief comparison of one or two monographs taken at random from the eighteenth edition of "Squire" with the corresponding monographs in the British Pharmacopœia will be sufficient to prove my contention :

The British Pharmacopœia contains 389 pages of text; Squire's "Companion" 1259 pages.

The monograph on belladonna-root in the British Pharmacopœia occupies seventeen lines; that in the "Companion" occupies one and a quarter page.

The B.P. monograph on nux vomica consists of seventeen lines; the corresponding monograph in the "Companion" occupies five pages.

The monograph on opium in the B.P. occupies practically two pages; that of the "Companion" eight pages.

The B.P. monograph on oleum morrhuae occupies eighteen lines; that of Squire's "Companion" a little over three pages.

The monograph on thyroid in the B.P. occupies sixteen lines; that of the "Companion" two pages.

Again, in less than 300 pages of Squire's "Companion" there are more than 100 complete monographs on substances which are not included in the Pharmacopœia at all. These are a few illustrations taken at random, but similar instances may be quoted from any section of the book.

As regards liquor morphinæ bimeconatis, the inclusion of a formula for this preparation in the British Pharmacopœia was never requested by me or by my firm. A formula was inserted in the B.P. 1885 by those responsible for the production of this edition, but it did not represent the process used for Squire's solution of morphine bimeconate, and the two products bore no resemblance to one another. Liquor morphinæ bimeconatis B.P. 1885 was obtained simply by dissolving freshly precipitated morphine in a mixture of water, rectified spirit, and meconic acid. Squire's solution of bimeconate of morphia is a purified solution of opium containing the alkaloids in their natural state of combination, and is evolved by a lengthy process of purification and standardisation. The B.P. 1885 formula for liquor morphinæ bimeconatis was not repeated in B.P. 1898.

London, May 22.

P. W. SQUIRE.

Assistants and the Sale of Poisons.

SIR.—In your report of the annual meeting of the Pharmaceutical Society, I was much impressed with the remarks of Messrs. Pentney and Douglas with regard to the necessity of the recognition of assistants in relation to the sale of poisons. Many a country chemist—ay, and for that matter, many town chemists also—have suffered the mortification of discovering that because of the sale of some trifling quantity of laudanum, paregoric, or red precipitate, his capable, trustworthy, intelligent, and careful assistant who, perhaps, has been in his service for years, has been mulcted in a fine of 5*l*. He himself joined the Society perhaps thirty years ago, he has regularly paid his subscription, and often wondered what good he received in return. The first "Society" shock he has felt is perhaps the annoyance caused by such a procedure as I have just mentioned, and he vows he will continue to subscribe no longer. The pharmacist exists for the benefit and safety of the public. But if he is to be constantly harassed by the nightmare of the possible clandestine and predatory visits of the "ex-policeman," where does the protection of the "Society," which he claims and has a right to, come in? Illicit and illegal sale of poisons should be stopped. The Society is the organisation to do it, but the honourable, loyal pharmacist, who is carefully conducting his business in person, with the aid of his trustworthy and experienced (although by examination legally unqualified) assistant, ought not to be the subject of these annoying visitations from the Society's spies. The sooner this ceases the better for all concerned. Where, on the other hand, illegal practice of pharmacy is carried on by unqualified proprietors of the innumerable drug-stores of the country, and poisons of all kinds sold day by day in increasing quantities, then by all means let the Society strike, and strike hard. In regard to this let the Society "wake up," but where businesses are conducted on legal, legitimate lines and under practically unbroken supervision by the principal, helped by a capable assistant, for heaven's sake let the Society cease harassing, vexa-

tious, unnecessary and uncalled-for threatened prosecutions, and in the future loyally stand by those of their friends who are doing their best, with the narrow means at their disposal, to further at all times the best interests of pharmacy.

I am, yours, etc.,

SCRUTATOR. (182, 3.)

Ph.C. (181/22) also writes : The annual meeting passed off with a smoothness that gave no indication of any coming storm, the discussion being on the whole irrelevant and pointless. The one point of really practical importance was the demand of Mr. Douglas that some way should be found by the creation of an assistant's qualification to mitigate the hardship of those pharmacists whose businesses cannot afford two qualified men on the staff. The one-man pharmacy is a very serious problem, much more serious than the prosperous city pharmacist has any idea of, and from the nature of the case the grievance is kept in the background by those who feel it most. I think, therefore, that we owe much to Mr. Douglas for having brought it forward, and I hope he will keep it at the front. Nothing will more tend to the increase of company pharmacy and to the degradation (in the political sense of course) of the craft than the persistent refusal to face this problem. Mr. Martin is quite right in saying there is nothing in the Act about an assistant being qualified by experience; what is wanted is that a statutory qualification for assistants should be created other than the very high standard now required for the Minor examination.

Subscribers' Symposium.

For questions, answers, incidents, and interchange of opinions among "C. & D." readers.

Unusual Calls.

Your correspondent asks for caps to his night-call. Some years ago when I first took over my business the quietude of the early Sabbath morning was rudely disturbed by continuous ringing of the door-bell. On descending, I found a gentleman who blandly told me he did not want anything; he was only passing, and wondered if, in case he had been ill, he could have obtained medicine. I found afterwards that he was a hypochondriac.—*Owl* (167/53).

A Tripletic Remedy.

It would have been better for Pharmacy
Had we had breadth of vision all round,
Gracing shrines of the Art and the Mystery.
It would have been better for Pharmacy
If a case had not ended disastrously,

Which laid us in dust on the ground.
It would have been better for Pharmacy
Had we had breadth of vision all round.

H. J. H. (Hitchin).

Beware of this Shampoo-powder.

Will you find room for an exposure of a nasty little swindle on chemists which is going the rounds about here? A packet of shampoo-powder is purchased from a chemist, and the parties then tout the town and offer for sale envelopes (plain, containing about $\frac{1}{4}$ oz. of soap-powder) at 2*l*. each, or seven for 1*s*. "As an advertisement," a free brush and comb will be given with each 1*s*. worth. Several of the victims have called for "their brush and comb." It is rather hard lines to have one's name used in this fashion, and the police think our trade paper the best way of giving publicity to it.—W. H. Lester (Bedworth).

Troussau's Powder.

Mr. Cicero S. Clark, Westbourne Grove, London, W., calls attention to the formula for this in Dorvalt's "L'Officine" in reply to the note in our issue for May 18 (index folio 758).

Sou-carbon. de fer ...	...	...	2.0
Yeux d'écrevisses ...	...	...	4.0
Nitrate de bismuth ...	...	...	6.0
Sucre ...	...	...	6.0
Laudanum de Sydenham ...	...	gouttes	10

Div. en 20 prises. Deux par jour chez les enfants épaisés la diarrhée.

We ought to add that in the prescription referred to by "M. P. S." the powder was ordered as an ingredient in a mixture.

Doctor v. Chemist.

A customer brought in a bottle this afternoon for two-pennyworth of liquid ammonia. It was a plain medicine-bottle with an ordinary doctor's slip (lotion, etc., on it), with

a red poison slip below. The customer was surprised that I would not put ammonia into the bottle. How chemists are humbugged, while others are allowed to do as they please!—*J. S. H.* (181/55).

[Doctors who dispense scheduled poisons without giving their names and addresses are, under Section 17 of the Pharmacy Act, 1868, liable to a fine not exceeding 5*l.* for each offence. Punishment in a few flagrant cases would be a public service. Registered medical practitioners are exempt from the regulations which must be observed by chemists and companies in dispensing and selling scheduled poisons.—*EDITOR, C. & D.*]

It Got There.



Reduced facsimile of a postcard delivered a few days ago to Messrs. Evans Sons Lescher & Webb, Ltd., Bartholomew Close, London, E.C.

Explosive Weed-killer.

J. S. H. (180/69) informs us that a gardener told him the other day that he obtained a stock of powder weed-killer, which was not all used at the time, and the tins were stored in a dry place until the following spring. Then several of the gardeners were busy potting plants, when the lids of the tins commenced to blow off, sending the contents flying all over the place. The gardener threw a sack over the box and rushed outside with it, but got burnt as several of the tins were nearly red-hot. The day after this letter was delivered to us we received one from a well-known firm of manufacturing chemists, calling our attention to No. 5 formula for weed-killer in "Pharmaceutical Formulas," p. 420, which is as follows:

Arsenite	... ...	3 oz.
Sulphate of copper	... ...	1 oz.
Caustic soda	... ...	1 oz.
Saltpetro	... ...	$\frac{1}{2}$ oz.
Sulphur	... ...	$\frac{1}{2}$ oz.
Sal ammoniac	... ...	$\frac{1}{2}$ oz.

Mix.

Of this 5 to 10 lb. to 30 gals. of water is used, according to the nature of the weeds.

Our correspondents say that this is dangerous, and has caused a small explosion in their place—a fact which is no doubt due to the action of the caustic soda on the sulphur and saltpetre. The formula is an abstract of several expired weed-killer patents which are quoted in "Pharmaceutical Formulas." It is probable that the weed-killer referred to by "*J. S. H.*" was of similar composition. The circumstances should be noted in the book.

Dispensing Notes.

This section is for the discussion and solution of dispensing problems and prescriptions submitted by "C. & D." readers. We are always pleased to receive the opinions of readers for publication. "The Art of Dispensing" ("C. & D." Office, 6*s.*) is the standard book of reference on this subject.

Liq. Ferri et Ammon. Acet.

SIR.—I have had an American serum brought in which reads as follows:

Strychnine sulph.	... ...	gr. ss.
Liq. potass. arsenitidis	... ...	5ij.
Liq. ferri et ammon. acet. ad	... ...	5vij.

5ij. t.i.d. ex aq.

I should be obliged if you would tell me what is the iron preparation ordered, as our liq. ferri acet. gives dose of 5-15 minimis. Their preparation is evidently a much weaker one, but I cannot find it in any of the books of reference that

I have. I have dispensed it by giving 5-minim doses of the liq. ferri acet. of the B.P. Yours faithfully,
Bingham, May 18. CHAS. C. H. CADGE.

[This is Basham's mixture of the U.S.P., and the formula is given on p. 700 of "Pharmaceutical Formulas," thus:

Tincture of ferric chloride	... ...	40 c.c.
Diluted acetic acid	... ...	60 e.e.
Solution of ammonium acetate	... ...	500 c.c.
Aromatic elixir	... ...	120 e.e.
Glycerin	... ...	120 c.c.
Water to	... ...	1,000 c.c.

Mix the solution of ammonium acetate (which should be alkaline) with the acid, add the tincture, then the rest of the ingredients in their order, and mix.

It was formerly entitled *mist. ferri et ammon. acetatis.*]

Glycerophosphate Mixtures.

SIR.—Re the "Viscous Mixture" under "Dispensing Notes," may I say that at a large dispensing practice in London we on several occasions found a difficulty with "syr. glycerophosph. co." in water? After consultation with the makers, we proved by experiment that the gelatinous result was quite avoided by using chloroform-water. This we always did, informing the prescriber of the necessity of such a course. Yours faithfully,

Parkstone.

J. C. LONG.

Two Problems.

SIR.—I would be much obliged for your opinion upon the advisability of dispensing either of the following prescriptions as written.

No. 1.			
Liq. ferri perchlor.	... ...	3j.	
Ammon. bromidi	... ...	3j.	
Spt. chlorof.	... ...	3j.	
Glycerin.	... ...	3vj.	
Aquam ad	... ...	3vj.	

No. 2.

Potassii iodidi	... ...	5j.	
Quinin. sulphat.	... ...	gr. vij.	
Acid. sulph. dil.	... ...	5ij.	
Syr. aurant.	... ...	5inj.	
Aquam ad	... ...	3vj.	

If any alterations, what suggestions?

Yours truly,

H. C. M. (173/65.)

[There is no objection to dispensing both prescriptions as written. Alteration of any kind is quite unnecessary. No. 2 looks as though it might give trouble, but none arises. Mix the quinine sulphate, dilute sulphuric acid, syrup of orange, and water, then add the potassium iodide and dissolve. The mixture is clear at first; afterwards—in two days or so—it acquires a straw colour.]

Lysol and Zinc-chloride Lotion.

SIR.—Will you be good enough to explain how the following ought to be dispensed so as to give a presentable appearance?

Yours truly,

J. W. (172/36.)

Zinc. chlorid.	... ...	gr. vij.	
Glycerin.	... ...	5ss.	
Lysol.	... ...	mqx.	
Aq. dest. ad	... ...	5j.	

Mitte 5vij.

[This is a case of incompatibility between the zinc chloride and the lysol. Zinc soap is formed. This is insoluble in the liquid and forms clots, which mostly adhere to the bottle. The formation of large clots can be prevented and the insoluble soap obtained in fine particles diffusible in a presentable way by the employment of tragacanth. Dissolve the zinc chloride and glycerin in 5 oz. of water and add mucilage of tragacanth to make 8 fluid oz.; add this gradually to the lysol placed in a mortar, proceeding as if an emulsion were being prepared. While this procedure presents the lotion in a workable form, the question arises whether the addition of tragacanth may not be objectionable in use for the purpose for which the preparation is required. Our opinion is that the correct procedure is to point out to the prescriber the incompatibility—which would not occur to him—and explain the reason.]

Legal Queries.

Grateful (182/53).—No. Read the article on "Armorial Bearings in Trade" in our issue of January 27, p. 125. No change has occurred in the law since.

Cobbler (182/18).—The article being an entire drug, you, as a registered chemist, may say anything you like about it without incurring stamp or licence duty. The present wording does not involve you in liability.

L. A. B. (176/7).—The Sale of Food and Drugs Act inspector who bought chloride of lime from you most probably meant chlorinated lime of the British Pharmacopoeia, and not calcium chloride. The latter was meant fifty years ago, as our Retrospect of May 18 showed. Be careful with the reserved sample of the chlorinated lime which you sold to him, as advised in the *C. & D. Diary*, p. 445, under "What the Seller should Do."

Romjia (178/10).—If the notice given to you is in accordance with the agreement we see no ground for action against your present employer. Statements that he has made to you are privileged, but, apart from that, while you have every opportunity for checking the goods inwards and outwards, you appear not to have fully availed yourself of that opportunity; otherwise you could have disproved the statements made to you by producing the necessary figures.

E. R. (177/27).—If a woman and her son start a business under the circumstances narrated in your letter, it will constitute a partnership, and if for a term of more than a year should be reduced to writing. All her property would be liable to come within the estate in the event of the business failing. It may be advisable, therefore, that the business should be constituted a limited partnership, the woman being the limited partner. On this point she should be advised by a local solicitor.

Stamp (179/29).—Upwards of seven years ago A lent B, his brother, £50/-, receiving as acknowledgment a bill or an I.O.U. It was mutually understood that A would not exact repayment until B should be clear of other debts. B died, leaving his widow sole beneficiary and executrix. The £50/- was included among B's debts for probate. The widow has not admitted liability in respect of the debt, and neither she nor B has ever paid interest on it. Can A recover the debt under any circumstances? The widow cannot pay the debt at present, but will do so when she is able. [A cannot now enforce his claim by legal proceedings unless there was a binding agreement that the £50/- should not be repayable until a date which is less than six years ago, or, unless B, within the last six years, gave A a written acknowledgment for the debt.]

Shops Act: Questions and Replies.

H. K. W. (13/24).—The Section 4 notices have only to be exhibited while the shop is open during closing hours, and if this happens to be "year in and year out" the notice will also have to be exhibited "year in and year out."

Bodilan (183/35).—The outside notice can be placed outside when any customer enters the shop to be served during closing hours. If the entrance is by a side-door, the notice can be placed there and taken in again when the customer leaves.

C. P. (8/33) asks whether a chemist living on the premises and closing his shop completely, but answering the bell during closing hours, must exhibit the Section 4 notice? [Yes, in such circumstances the shop is not closed for the serving of customers in accordance with the Act, and the notice should be exhibited, outside and inside, while the customer is being served.]

F. W. B. (3/34) was called upon at 11.20 p.m. for a teat for a boat-shaped feeding-bottle. Was he entitled to supply it? [If it was not early-closing day, yes.] (2) Is an india-rubber teat a medical or surgical appliance? [It is part of a feeding appliance, in the same category as a spoon, until the contrary can be proved; for example, if a mother is physically unfit to nurse her infant, and her medical adviser prescribes a feeding-bottle for the child, the feeding-bottle would come into the category of medical appliances.] (3) The half-holiday closing hours are from 1 p.m. to 12 midnight—i.e., when one day ends and another begins.

A Belfast Pharmacist (13/17) states that a prominent official informed him that in the event of a closing order being made it would be so framed as to prevent the supplying of any medicines whatever, prescriptions included; in other words, an absolute closing order, the same as applies to a draper's shop. Has the local authority power to make such an order? our correspondent asks. [No; Section 10 (2) of the Act prevents the application of an early-closing order to exempted trades or businesses. There is special provision in Ireland as regards shops in which intoxicating liquors are sold, and any of these which are chemists' shops can by special order be absolutely closed for serving customers. See Section 21 (8).]

X. Y. Z. (12/24).—The widow of a chemist carries on her late husband's business with the assistance of a qualified manager and a boy. Since the passing of the Shops Act there is a feeling among the doctors that the shop should be opened for the dispensing of prescriptions for two hours on the evening of the half-closing day. The manager is

willing to undertake this duty, and he wishes to know if he can legally do so. [Yes, if it is not his half-holiday, otherwise the widow is the offender.] If permitted, will the widow be compelled to give him a half-holiday on another day of the week? [Yes.] Can the manager, when at home above the shop, dispense on the half-closing afternoon? [Provided he gets a half-holiday once a week from 1.30 p.m. to 12 midnight he can dispense at any time else. Prescriptions received during that time may be dispensed after midnight.]

Provident (183/9) asks: Is a dispenser employed by a provident dispensary entitled to a weekly half-holiday under the Shops Act? The members of the dispensary pay a monthly subscription, in return for which they receive medical attendance and medicine. The dispenser is paid a salary and dispenses the drugs bought by the Dispensary Committee. [In our opinion the dispensary is not a shop within the meaning of the Act, and in consequence the dispenser is not a shop-assistant. Section 19 states that "the expression 'shop' includes any premises where any retail trade or business is carried on." The Home Office says: "Generally speaking, 'retail trade' is the sale of goods in small quantities to the public." There has been no attempt under the old Acts (in which a similar definition is given) to bring such dispensaries within their province.]

W. W. (180/27).—(1) Our reply to "Uncertain" is quite right. If you shut your shop for a half-holiday and go into it between 1 p.m. and 12 midnight to serve a customer, the shop is "kept open" within the meaning of the Act during that time; therefore the Home Office notice should be exhibited while you are serving the customer. In the event of the notice not being exhibited, and proceedings are instituted against you, you would be acquitted under Section 4 (7) if you satisfied the magistrate that the article was required in case of illness. This is a defence, not an exemption—a fact which has probably been overlooked or not appreciated by the periodical from which you quote. (2) Sticking the notice inside the window is not exhibiting it "in some conspicuous place on the exterior of the shop" as required by the regulations, nor is it "both outside and inside the shop" as stated in the memorandum. These are the official words, and require no interpretation; one notice inside and one outside are necessary; you seem to want to put two inside.

Look-out (175/6) asks if it is legal for chemists in a manufacturing town to exhibit the following card in their windows: "This shop is closed on Thursday at 1 p.m. Medicines and working material may be had at the warehouse, No. 42 — Street." By "working material" such articles as emery, glue, beeswax, french polish, varnish, etc., are meant, and the address is the side-door of the shop. [This means that the shop is not closed, and that business is carried on. If Thursday is the half-holiday selected by the shopkeeper or ordered by the local authority, the shop is kept open illegally, as the materials referred to are not goods in the exempted schedule, and the sale of them by the shopkeeper is illegal on his part. He is entitled to keep the shop open for the sale of medicines, but he must exhibit inside and outside the shop the notice required by the Home Office, which must be in the following words printed in letters 2 in. high:

"This shop is closed for to-day except for the sale of medicines and medical and surgical appliances." The notice referred to by our correspondent is not illegal, and may be exhibited, but it cannot replace the prescribed notice, as it does not meet the requirements of the Act.]

J. A. H. (176/51).—(1) We have repeatedly stated that Section 10 (1) provides that in the case of mixed shops early-closing orders do not apply to any of the trades carried on in such shops which are exempted by Section 4 (6) and the second schedule of the Act. This includes the sale of medicines and medical and surgical appliances. If there is only one chemist in a town, and his is the only shop of the kind exempted, he still has to observe the law, which is that on one half-day per week his shop must be closed except for the sale of medicines and medical and surgical appliances. It is on that half-day while his shop is open that he must exhibit the Section 4 notice. (2) The hour for closing fixed by the Act is 1 p.m., but the local authority may fix some other hour not later than two o'clock. Chemists may fix any hour they like for closing their shops as regards medicines and medical and surgical appliances. Stroud chemists probably decided to close at 1.30 p.m. because that is the hour at which the assistants' half-holiday begins. (3) The time allowed for dinner is forty-five minutes indoor and one hour outdoor. You should get copies of our Section 4 card, as all these points are given on it in the words of the Act, and you are "puzzled" because you have not read it.

Miscellaneous Inquiries.

We do not as a rule repeat information which has been given in this section during the past twelve months, as it occupies space which can be more profitably utilised for other information. In such cases the numbers are mentioned, and if querists cannot refer to these they may obtain the numbers from the "C. & D." Office at the published prices, usually 6d.

We do not undertake to analyse and report upon proprietary articles, and when samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how.

W. G. J. (129/42).—(1) The British Pharmacopœia is the legal standard in Canada, but the United States Pharmacopœia is also used; in fact, the practice of pharmacy is distinctly American in style, and naturally so, considering the contiguity of the two countries. (2) Human ailments are much the same there as here. (3) The pharmacy law of Canada is more stringent than ours as regards drug-stores, which can only be opened by persons registered in the province where it is situated, and no one is registered now who does not pass at least the Final examination of the pharmaceutical authority of the province. See British Dependencies in *C. & D. Diary*, p. 437.

A. P. W. (140/67) asks if any change occurs in the chemical composition or in the anaesthetic properties of the following if kept for a month in corked clear-glass bottles: (1) Chloroform; (2) chloroform and ether, equal parts; (3) chloroform, ether, and alcohol, equal parts. [Alcohol added to chloroform by direction of the British Pharmacopœia is for the purpose of preserving it when kept under these conditions, and we have seen chloroform forty years old kept in that manner which had not altered in the slightest. No change should occur in the second and third mixtures unless what may be due to slight evaporation. The more volatile ether will naturally evaporate to the greatest extent, but that will be slight if the bottles are well corked.]

C. R. W. (140/17).—CLEANING PIANO-KEYS.—The simplest method for retail sale is to supply spirit of sal volatile and prepared chalk. A piece of soft rag is wetted with the liquid, dipped in the chalk, and rubbed on the keys. In cases where a process is required by piano-makers and the keys are detached, alkaline peroxide of hydrogen is employed. About 4 oz. of strong solution of ammonia is added to 32 oz. of peroxide of hydrogen; the ivory keys, previously freed from grease by soaking in soda solution, are immersed, covered over, and the vessel kept warm in a water-bath. After twenty-four to thirty-six hours the keys are taken out, washed, and dried gradually in the air.

J. B. (142/40).—WORMS ON PUTTING-GREENS.—For an eighteen-hole golf-course a little less than 2 gals. of the concentrated solution of mercuric chloride will be required. Twenty gallons of the diluted solution will be quite sufficient for each green, and two breakfast cupfuls of the concentrated solution—about 16 oz.—will make 20 gals. of the diluted solution, which means that a gallon of the concentrated solution is sufficient for ten greens. Common salt may replace the hydrochloric acid in the formula with advantage, so that the concentrated solution becomes the following:

Mercuric chloride ...	... 1 lb.
Common salt ...	... 1 lb.
Water to ...	... 1 gal.

Shake or boil until solution is effected.

Dilute a breakfast cupful of the product with 10 gals. of water to sprinkle upon the greens. For a non-poisonous method, mustard-bran may be spread upon the greens.

H. E. L. (144/47).—TYRE-PUNCTURE PREVENTIVE.—We do not know the particular powder to which you are referring, but the basis of those we have examined of late has been found to be dextrin. This is variously coloured to make it more acceptable to the purchaser. A quantity of the powder is inserted in the tyre, and then a little water added, with the result that a gummy compound is formed, which tends to close up any perforation.

G. S. R. (Bombay) (146/13).—GELATIN-MOULD.—We do not recollect publishing a process for making gelatin-moulds from which plaster castings can be made, but the method is as follows: Soak 12 oz. of gelatin in water for a few hours, drain, liquefy by heat, adding 3 oz. of molasses and stirring till homogeneous. The object to be copied is oiled and placed in the gelatin solution. When the gelatin is set the object is removed, and the mould brushed over with a saturated solution of potassium bichromate. After this is dry it is exposed to sunlight, which renders the surface hard and insoluble.

S. & Co. (139/66).—GALLIPOLI OLIVE OIL is one of the best of the Italian oils. The most prized qualities are those produced in Tuscany (Lucca, Pisa), the Ligurian Riviera, and the Puglia (Bari, Bitonto, Gallipoli).

Tuscan (175/63).—(1) Sodium salicylate and quinine sulphate, if prescribed together in a mixture and sufficiently concentrated, give a bulky precipitate; 20 minims of acacia mucilage suffices to keep it suspended until the dose is poured out and administered. (2) The calf two months old, which has got cold through being out in the rain, requires careful nursing and nourishment rather than medical treatment. It should be kept in a clean and warm place and be given warm nourishing food. (3) ANGLEBERRIES ON A CALF.—Equal parts of white arsenic and soft soap is a common application for this purpose, but any other escharotic is just as good; for example, carbolic colloid, which is equal parts of phenol and collodium.

J. W. M. B. (175/2).—The alkaloid yohimbine is used for the purposes referred to in your letter.

W. H. M. (150/41).—(1) SALVARSAN TREATMENT.—We have published full particulars of the pharmacy of salvarsan, but the medical uses are dealt with in Martindale and Westcott's "Salvarsan ('606'), its Chemistry, Pharmacy, and Therapeutics" (Lewis, 5s.). (2) CHURNING-POWDER.—This, we take it, refers to butter-powder, which consists of sodium bicarbonate alone, or a mixture of that salt with an equal proportion of cream of tartar.

Mumpara (172/34).—BLACKBEETLE-PEST.—There are several ways of attacking this problem, but trapping methods should first be tried—fresh cucumber-peelings or soup-plates of beer with thin pieces of wood leading to the edges of the plates. Then can be used (1) insect-powder, (2) equal parts of borax and brown sugar, or (3) a mixture of arsenic 1 part, powdered sugar 1 part, plaster of Paris 2 parts.

F. C. (173/37).—ICE-CREAM POWDER.—What is your objection to the recipe in "Pharmaceutical Formulas"?

Querist (158/19).—COLD-CREAM.—We must refer you to "Pharmaceutical Formulas" for this, as the subject is too large to be treated here.

J. F. (Laeken) (161/26).—BOOKS ON CHILDREN'S DISEASES.—We think you will find most useful Freyberger's "Pocket Formulary for the Treatment of Diseases in Children" (Rebman, 7s. 6d.).

Booco (164/21).—PRESERVATIVE.—Sulphurous acid will not be suitable for use as a preservative in table-jellies, as it affects the flavour adversely. In the form of sodium bisulphite or potassium metasulphite there is less risk of injuring the taste. The use of sulphites and sulphurous acid is condemned by American authorities.

A. F. (165/8).—SKIN-CREAM.—We published eight formulæ of the jelly type of skin-cream in the *C. & D.*, April 10, 1909, p. 565, but we do not think any of them can be described as perfectly transparent. It is probably the essential oil in the tragacanth-cream that produced a translucency, and in place of it could be employed a flavouring-water, such as orange-flower.

W. G. S. (160/7).—We are not acquainted with the liquid for cleaning dental plates to which you refer.

S. & Co. (Paris) (165/52).—(1) COLOURING AND PERFUMING BATH CRYSTALS.—See *C. & D.*, May 4, index folio 664. (2) COLOURING AMMONIA.—Aniline dyes are used for this purpose, but experimental work needs carrying out to determine which are the most suitable. Nothing exhaustive has been published on the subject, but for violet methylene-blue is recommended.

J. W. S. (169/1).—REMOVING MARKING-INK STAINS.—If these are caused by a silver ink use iodine and potassium cyanide alternately. If an aniline ink is to be removed, use alternately a dilute ammoniacal solution of potassium permanganate and dilute solution of sulphurous acid, washing with water between the applications.

Puzzled (150/64).—(1) BOOT-DRESSING.—There is no brighter colour for this than nigrosin. The presence of neatsfoot oil in your formula tends to make the blacking difficult to polish. (2) STOVE-POLISH.—The same remarks about the aniline dye apply here. An increase in the amount of the dye would give a more intense black.

J. G. N. (133/23).—RECORDING-INSTRUMENT INK.—For use in recording instruments, where the ink is conveyed by means of capillary glass siphons, the thinnest possible fluid is necessary. Inks consisting simply of a solution of aniline

dye in water (3j. to 3vj.) answer perfectly. For red use eosine, erythrosine, phloxine, ponceau scarlet, or cotton scarlet; green, Neptune green S.G., diamond green G. & B., light green S.F. (yellowish), and light green S.F. (bluish); blue, indigo earmine and soluble blue T.; violet, acid violet 4 B.L.; yellow, fast yellow and tartrazine.

R. S. (160/74).—"Fine red salt," referred to in the *C. & D.*, April 20, as an ingredient of lawn-sand, is crude rock-salt ground to powder.

W. N. (161/8).—STRAW-HAT CLEANER.—As a non-poisonous straw-hat cleaner we are told that cream of tartar answers well.

Hectograph (170/1).—GELATIN COPYING-PAD.—A formula was last given in the *C. & D.*, August 19, 1911, index folio 334.

G. W. (159/54).—DULL STRAW-HAT VARNISHES.—See *C. & D.*, September 24, 1910, index folio 497, and October 1, 1910, index folio 518.

W. H. (165/59).—MIXING CASEIN with water is not always easy, and the ease with which it can be done varies according to the fineness of the powder and degree of hydration. The tip seems to be to add a fair proportion of water to the casein and stir vigorously. If too little water is used an intractable paste results, and with too much water the casein floats and becomes lumpy.

W. S. & Co. (168/61).—You will have no difficulty in thickening the electuary by using a small proportion of powdered tragacanth.

Canine Fancier (167/71).—LIQUID DOG-SOAP.—See *C. & D.*, October 28, 1911, index folio 664.

J. G. (173/30).—BEGINNING PHOTOGRAPHY.—This is best undertaken after reading the Ilford "Manual of Photography" (Ilford, Ltd., 1s.), where full guidance is given to the various processes.

Leather (5/5).—TO BLACKEN LEATHER.—To meet your requirements of a leather-dye that will not rub off and dries quickly the following recipe will be found useful. The resulting compound is thick, and is applied in a thin coat with a sponge:

- A. Orange shellac 200 oz., spirit 1,000 oz.
- B. White Castile soap 25 oz., spirit 375 oz., glycerin 40 oz.
- C. Aniline dye 5 oz., spirit 125 oz.

B is mixed while hot with *A* and *C* is added. The mixture is well shaken and set aside for a few weeks before use, occasionally agitating the mixture.

A. R. C. (164/29).—(1) The use of ammonium phosphate in batteries is new to us. Sal ammoniae is commonly employed. (2) BOOKS ON ELECTRICITY.—Hadley's "Magnetism and Electricity for Beginners" (Macmillan, 6s.); Walmsley's "Electricity in the Service of Man" (Cassell, 10s. 6d.).

Mae. (281/35).—A trade-mark for a rat-poison should be registered in Class 2.

Potato (169/14).—BLACK SCAB IN POTATOES.—Leaflet 105, obtainable free on application to the Board of Agriculture and Fisheries, 4 Whitehall Place, London, S.W., gives instructions for treating this disease of potatoes.

Glass (162/46).—MARKING GLASS.—A liquid with a soapy basis answers best for marking glass before cutting. The following has the advantage that it is easily removed from the glass with a wet sponge when finished with:

Hard soap (in shavings) ...	... $\frac{1}{2}$ oz.
Spirit ...	... ... 10 oz.

Digest at a temperature not exceeding 70° F., agitating occasionally, for seven days; filter, and dissolve in the filtrate

Erythrosin ...	... ... 50 grains
Aurin ...	... ... 50 grains

Lxion (153/63).—FRENCH-CHALK BLOCKS.—Your inquiry is too vague to enable us to give a satisfactory answer. If the "polishing purposes" referred to are laundry uses, it is soap or paraffin wax that is employed in making the blocks.

A. S. (152/10).—OPTICAL EXAMINATIONS.—Full particulars of these were given in the Educational Number of *THE CHEMIST AND DRUGGIST* (August 12, 1911), index folio 297.

T. J. (159/39).—POLYGLOT DICTIONARY.—Rousseau's "Polyglota Vade-mecum de Internacio-Farnació" (Hachette, 7f.50) gives the names of most drugs and chemicals and pharmaceutical terms in about eight European languages. It was produced to promote the use of Esperanto, but is so arranged that it can be employed as a polyglot dictionary.

J. T. (168/14).—We require further information as to the use of "blast" ointment. "Blast" in sheep is an internal disease, for which ointments are inappropriate.

R. W. W. (171/70).—TAKING UP OPTICS.—You should procure a copy of "The Chemist-Optician" (Office of the *C. & D.*, 4s. net). This book gives the information regarding the study of optics which you desire.

W. H. B. & Co. (168/49).—POWDER CLEANSER.—The powders employed as cleaners in the household are composed of kieselguhr. These act mechanically and answer the purpose very well indeed.

A. S. (150/49).—HONEY AND FLOWERS.—See *C. & D.*, October 29, 1910, index folio 674.

H. I. (149/7).—It is outside our province to recommend hair-dyes for personal use. There is nothing derogatory in possessing grey hair, even if you are young.

J. C. (174/12).—(1) THYMOL TOOTH-POWDER.—The following is from "Pharmaceutical Formulas":

Thymol	...	...	...	...	3ss.
Camphor	...	...	...	...	3j.
Rub together until liquid, then add					
Precipitated chalk	...	...	...	...	5xxx.
Powdered soap	...	...	...	...	5x.
Saccharin	...	...	...	...	gr. xv.
Vanillin	...	...	...	...	gr. vj.
Otto of rose	...	...	...	...	a sufficiency

Mix well and sift.

(2) CHEAP SHAMPOO-POWDER.—This is prepared by scenting a commercial soap-powder with citronella or similar perfume. It is packed in envelopes containing about $\frac{1}{2}$ oz.

Scio (256/9).—INDIAN DRUGS.—Your customer is referring to the nim or margosa tree. The seeds yield an oil by pressure, which is employed in dressing ulcers and in other skin-affections. The bark of the tree is an astringent tonic, given in doses of 3j. of the powder, three or four times a day, in the form of a decoction of the bruised inner layer (2 oz. in Oiss. water), the dose of the decoction being 2 to 3 oz.

Condition (151/34).—CONDITION AND WORM POWDER FOR HORSES.—The following powder embodies the result of our examination of your sample:

Ferr. sulph. (coarse powder)	...	3ij.
Ferri sesquioxidi	...	3ij.
Magnes. sulph.	...	5vij.
Puly. zingib.	...	5j.
Puly. resinæ	...	5ij.

Misce. Dose: One tablespoonful every night for a fortnight, the last dose to be followed next morning by a pint of linseed oil.

Warping (179/71).—WARP-SIZE.—The size used for dressing the warps for weaving in the cotton industry consists of flour to which various fatty ingredients, such as tallow, soap, glycerin, and wax, are added to give a soft handle. The substance you send as being used for this purpose is coconut-oil soap. Copper or zinc sulphate is also frequently added for the purpose of preventing mildew, and dextrin in small quantity gives adhesiveness.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," May 15, 1862.

Safety Matches.

A congreve match is at once a good and bad servant, the paradox being maintained by its convenience as a means of obtaining a light, and the danger from its too ready ignition by accident. We are doing a public service, then, in calling attention to an improvement of this valuable invention, patented by Messrs. Bryant & May. The "Special Safety Match" will only ignite when rubbed on the prepared surface of the box. Neither friction, percussion, nor heat will otherwise produce combustion; and accidents are consequently impossible. What the compound is with which the match is tipped we know not, but it contains no phosphorus, it is not poisonous, it emits no unpleasant odour, and it is not liable to spontaneous combustion. So carpets need not be burnt by carelessly dropped matches being trodden on, nor wall-papers and panels disfigured by promiscuous rubbings by lazy light-seekers. The new match is really a great invention in an unpretending form.